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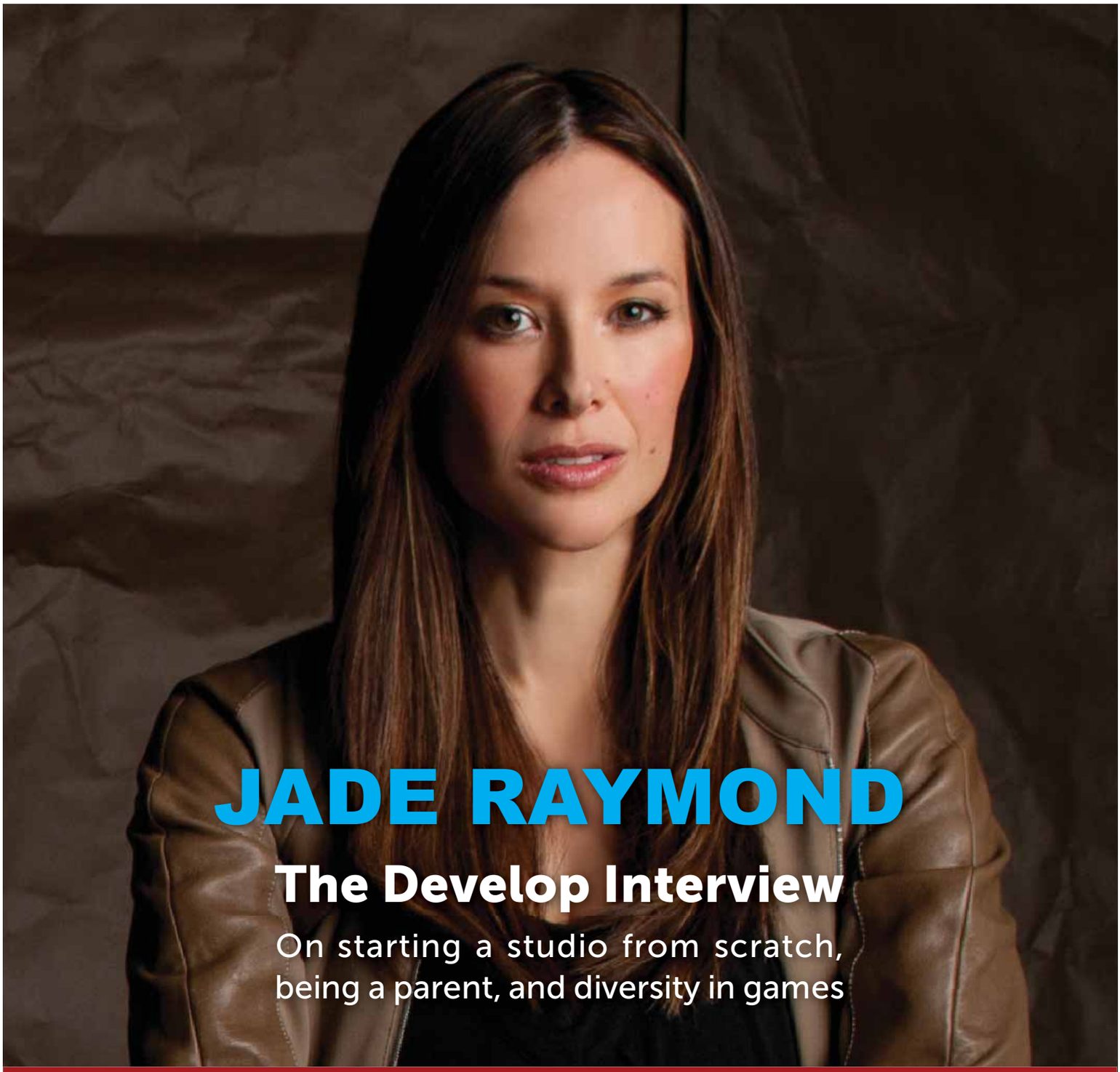

JADE RAYMOND

The Develop Interview

On starting a studio from scratch, being a parent, and diversity in games

INSIDE ▸ IMMIGRATION LAW ▪ AI IN FOCUS ▪ DEVELOP AWARDS FINALISTS REVEALED ▪ HAPTI.CO

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ALPHA

ADVENTURES IN GAMES DEVELOPMENT: NEWS, VIEWS & MORE

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Showtime!

The Develop Industry Excellence Awards are back for 2012. Did your company make the finalists list? Turn to page 10 now to find out

Behind the scenes at Hapti.co p6

UK tax breaks update p14

EDITORIAL

AND THE WINNERS ARE...

THERE'S BEEN MUCH arguing in the *Develop* office over the past few weeks. Secretly, and behind double-locked doors, the team has met again and again, disappearing for hours at a time to face-off.

We've tussled over the the virtues of success, the role of creativity and the definition of quality.

The reason for our days of dedicated deliberation? It's been that thrilling time of year when the *Develop* team has had to pick the finalists for the 2012 Develop Industry Excellence Awards, whittling down a list of many hundreds of companies put forward by the industry to just 96 finalists (which you can see on page ten of this magazine).

Settling on those finalists was tougher than ever this year, pointing to a golden era for games development. And, looking at the variety on display in the companies shortlisted, it's apparent that games development is more exciting now than ever.

Glance over the list and you'll see a microstudio team that has only spent 30 minutes together in the real world, two mobile games that need an external stimulous or movement to be played, and not one traditional publisher in our Publishing Hero category.

While the *Develop* team were distracted by the Awards, a debate swept the industry about cloning in games, after UsTwo released – and promptly recalled from the App Store – iOS title *Papa Quash*. Many felt it ripped off indie darling *Johann Sebastian Joust*. Perhaps it did, but I'm not here to comment on either game's integrity.

Instead I'd like to point to our industry's seeming addiction to sensationalism. It seems that, in the era of Twitter, a tipping point where everybody rushes to demonise comes a little too quickly. Did UsTwo deserve to be scolded? Possibly. Should our industry be proud of the venom, bile and nastiness directed their way? Absolutely not.

Will Freeman
will.freeman@intentmedia.co.uk

A world of their own

Hapti.co is Square Enix's new Danish studio, and it has set its heart on UGC and browser with Gameglobe. **Craig Chapple** asks game director Rune Vendler what makes the project matter

How did Haptic.co form? You're quite a new company?
We're a Square Enix company, and we were formed because there were all these opportunities in the emerging market – so to speak – of browser. It seemed that IO Interactive, the other Square Enix owned studio in Copenhagen, was very focused on *Hitman* and bringing that game to the market. So we needed somewhere else where these browser games had a great home and where they could be nurtured.

It made sense to build a different environment for that, and that was the thought that formed Hapti.co initially. We wanted to create an environment for trying these new things in these emerging areas.

And will you be focusing solely on browser?
We're looking at browser stuff at the moment, and that's the only thing we've spoken about for now, but that's never to say that's the only direction the studio will go in. But we do know the strengths we're bringing to browser. We have been working on boxed product for a while, and that's what we can bring to browser. In terms of future products, we can't talk about that right now.

A lot of the developers here came from IO Interactive. How did that come about?
The original idea for *Gameglobe* I had several years back when I was back at IO. These things, like browser, were all emerging then. They were things that were starting to happen all around us. The internet was connecting everybody, and user-generated content was coming along. Of course, it has existed since the 8-bit days in some way, but when I was at IO there was suddenly a power behind things like user-generated content that had not been there before.

We started with those ideas and then we took the action adventure genre, which we knew so well at IO Interactive because it was our staple, so to speak, and we decided to dive in and prototype.

It was just me and one other guy for a while, and we were seeing if there was something that we contribute in these new fields. Our prototypes made it clear there was something there. It was very simple, and nothing like the game we have today.

But it was a user-generated content game?
Yes. That was where we started, and quickly we saw there was gold there. So we started to see if it was a gold vein or just a single nugget, and it grew from there. We saw that there was something interesting, and that the market was in a place where it made sense to put our game in a browser and try out the free-to-play model.

It made sense to go with user-generated content and it made sense to set up Hapti.co as the place where these things would happen. That's how it came about. And I guess that's why it made sense to take some of the guys from IO Interactive who had worked on our prototypes.

And how have you tried to innovate in a world where things like *Minecraft* and *LittleBigPlanet* are so popular?
Firstly, it is great to already be put alongside those games, as they are masterpieces in their own right. It is amazing to be compared to those things.

I think what we have is a great quality for something that runs in a browser. It looks and plays very well, and it makes it very easy to forget you are playing a browser game.

Also, we've managed to create a tool set that is fun to use. It makes it great fun for the player to sit and almost doodle around with things, get inspired and do exciting things with. I think this is a toolset almost anyone can use and get something out of.

Of course everyone won't build a masterpiece every time, but we've had kids as young as five test the game, and they're able to move the mouse around and begin to shape a world, and they have a blast doing that. That to me shows that we've managed to create some tools that are inherently fun to use and can be approached even if you can't hold a crayon in the right way.

We've also created content ourselves – the levels – that matches the quality of traditional triple-A titles.

Do you feel there's somewhat of a risk in targeting all ages? It seems like it might be hard to please everyone from a five-year-old to an adult.
I don't think it's a risk, but it's a challenge. We won't target everyone initially. Hopefully

WHAT IS GAMEGLOBE?

Gameglobe is a free-to-play browser game that lets users create their own adventures. Like *LittleBigPlanet* before it, it will allow creative users to craft a diverse array of levels and experiences. Unlike Media Molecule's hugely popular title, it will run in-browser in HD, and is to be published by German giant Bigpoint. *Gameglobe* also promises to deliver a wealth of community aspects. Currently in closed beta, no release date is yet announced for the game.

everyone likes this, but it's a difficult one. It's been said that as everyone likes vanilla ice cream, you can't market it as it isn't a specific taste. But I'm sure you can. You can get it out there and get people eating it.

I think initially you'll see a couple of groups target *Gameglobe*. You'll see people who just want to play a game and have some fun. Some of those will start to use the creation tools, and some won't. We'll make sure that group is well supported.

I think the other group will be those attracted to the idea of creating games. Their entry point will be the world-building side, and the tools, tutorials and the community. We want to make sure those to groups are well supported.

And you've built the game with just in-house tools?

Yes. It is all proprietary tech built in-house. And it's the same tech we give the users. Going about it like that was a super

Hapti.co game director Rune Vendler (top-left), browser title Gameglobe (above) and the new studio's Denmark HQ (left)

Hapti.co's team plan to offer users the chance to create their own unique worlds using the same tools as the title's developers

important decision. I don't think we realised how important it was when we first decided. And, of course it has lead to some fights with level designers who were used to certain features or ways of doing things. We had to be tough and make it work from the end-user's perspective. We had to make sure we didn't cheat, and if we needed something, we would make it so we could share it with users.

So anything you have made that the player sees, they can build?
Yes. What's important is forming a trust relationship with the end-user. We have to be able to say 'if we can make this you can make this'. We had to stick to that. It's like when you read a mystery novel. There is almost a contract between you and the author that it has to make sense, and there has to be a solution. That's part of the deal.

So why go with browser? Why not mobile or console, for example?
Well, the fact that we've put it in a browser does not mean that we've decided not to put it on mobile or any other thing. But we are announcing it as a browser game, and there's no other plans for any other formats right now. The browser is a natural home for this, and so many people have access to it. And to make it available to everybody, we've spent a lot of time optimising the game so that the stream speed is very fast.

We wanted to make sure that you'd have to wait no longer than just buffering a normal video. And as you play, as everything is cached, it will get faster and faster each time. You will need a 3D graphics ability in the PC, but even the largest level on there is only about 500kb, so connection speed is not so important. We are always optimising, and we will always look at the metrics we get so that this game will reach as many people as possible.

Of course, there will still be users who build levels specifically designed to tax the largest water-cooled gaming PCs they can find.

Why have you done this as free-to-play?
There's a number of different reasons. First of all, it is a big thing that is happening in the industry that we wanted to try out. Secondly, we wanted to make sure nobody is blocked from trying the game by their own wallet.

In our closed beta period now, we are trying to work out exactly how we can make money off this thing. The key thing there is speaking to the users and working out what it is they value.

It's quite obvious from looking at things like Kickstarter that people are willing to pay for stuff they value, even if it isn't exactly an investment. People are willing to pay in that way because they value the things they will get out of it.

You're offering HD in a browser. Is *Gameglobe* part of a change in gaming that will make consoles redundant?
I really like consoles. I don't think browser and console exclude one another. There will always be people with different preferences, and I think it's great that gaming is available in as many different formats as possible. This isn't part of the end of consoles, it's the start of something else.

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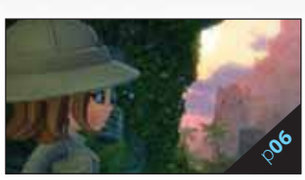

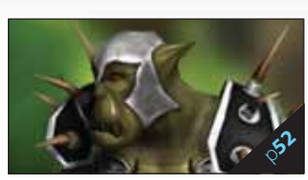

THIS MONTH: F2P browser title Gameglobe **YoYo Games' GameMaker: Studio** The Unity Asset Store in focus

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The Develop Industry Excellence Awards: The 2012 finalists revealed

96 companies working in or supporting European games development nominated across 21 categories, as the highly anticipated July ceremoney draws close

THE FINALISTS FOR the 2012 Develop Industry Excellence Awards have been confirmed.

Ninety-six companies, ranging from one-man outfits to development teams of over 200 employees, are in the running for key accolades that reward outstanding work done by games studios in Europe over the last 12 months. This year's nominations list offers arguably the most diverse array of finalists yet.

The full list of finalists can be found right here.

Winners will be awarded on stage at a gala ceremony on the evening of Wednesday, July 11th, hosted at the Hilton Metropole Hotel, Brighton.

"After a month of careful painstaking deliberation by the *Develop* team, no corner of the business has been left unturned," said *Develop* editor-in-chief Michael French.

"Finalists hail from across the UK and continental Europe, and come from every major games category, from core console and PC games to mobile, social, browser and free-to-play.

"Our shortlist shows that, as power continues to shift in the games development sector, new nimble online and indie developers are standing toe-to-toe with their big budget console brothers. We're looking forward to seeing who our jury picks as the ultimate winners in these hotly contested awards."

Now a jury of over 100 games development executives will vote for the winners ahead of the July ceremony. Judges will be named after the event in the August issue of this very magazine.

The Develop Industry Excellence Awards 2012 is sponsored by Platinum Partners Crytek and Deep Silver, Gold Partners Amiqus, Rare, Supermassive Games, Testronic Labs and UKIE, Studios Category Partner Game Connection, Table Gift Partner OPM Jobs, Drinks Reception Partner Nova Scotia Business, and Event Partner Zattikka.

To book your tickets, contact Kathryn.Humphrey@intentmedia.co.uk, or call her on 01992 535 645.

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www.developawards.com

THE FINALISTS

CATEGORY: CREATIVITY

NEW IP
Brink (Splash Damage)
Dear Esther (Thechineseroom)
Frozen Synapse (Mode 7 Games)
Monstermind (Bossa Studios)
My Horse (NaturalMotion Games)
Zombies, Run! (Six to Start & Naomi Alderman)

USE OF A LICENCE
Batman: Arkham City (Rocksteady Studios)
Battlestar Galactica Online (Bigpoint/Artplant)
LEGO Harry Potter: Years 5-7 (TT Games)
LEGO Life of George (LEGO Group Denmark)
Magic: The Gathering – Duels of the Planeswalkers (Stainless Games)
Peppa Pig (Strawdog Studios)
Team Hot Wheels Apptivity (Big Bit)
Who Wants to be a Millionaire? (Doublesix)

USE OF NARRATIVE
Batman: Arkham City (Rocksteady Studios)
Dear Esther (Thechineseroom)
Driver: San Francisco (Ubisoft Reflections)
Misfits: Community Service (Mobile Pie)
Where is My Heart? (Die Gute Fabrik)
Zombies, Run! (Six to Start & Naomi Alderman)

VISUAL ARTS
Batman: Arkham City (Rocksteady Studios)
Battlefield 3 (EA Dice)
Dear Esther (Thechineseroom)
Rayman Origins (Ubisoft Montpellier)
Trine 2 (Frozenbyte)
Wonderputt (Damp Gnat)

AUDIO ACCOMPLISHMENT
Battlefield 3 (EA Dice)
Batman: Arkham City (Rocksteady Studios)
Beat Sneak Bandit (Simogo)
Driver: San Francisco (Ubisoft Reflections)
Okabu (Hand Circus)
Total War: Fall of the Samurai (The Creative Assembly)
Zombies, Run! (Six to Start & Naomi Alderman)

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SCEE Xdev
Steam
Thumbstar

CATEGORY: TECHNOLOGY & SERVICES

TECHNICAL INNOVATION
Enlighten (Geomerics)
Kinect Sports: Season Two (Rare)
Monstermind (Bossa Studios)
MotorStorm RC (Evolution Studios)
My Horse (NaturalMotion Games)
Circus Challenge (Pitbull Studio)
Team Hot Wheels Apptivity (Big Bit)

develop
INDUSTRY EXCELLENCE AWARDS 2012

USE OF ONLINE
Aurora (nDreams)
Eve Online (CCP)
Monstermind (Bossa Studios)
Minecraft 360 (4J Studios/Mojang Specifications)
PlayStation Home (SCE)
Trials Evolution (Red Lynx)
World of Tanks (Wargaming.net)

VISUAL OUTSOURCER
Atomhawk Design
Axis Animation
Cubic Motion
Dimensional Imaging
Imagination Studios
RealtimeUK
TrioViz

AUDIO OUTSOURCER
Nimrod Productions
OM
Richard Jacques Studios
Side
The Audio Guys
Wave Studios

SERVICES
Audiomotion
LocalizeDirect
Pinewood Studios
Testronic Labs
Universally Speaking
VMC Game Labs

TOOLS PROVIDER
Autodesk
Epic Games
Firelight Technologies
Hansoft
Havok
NaturalMotion
RAD Game Tools
Unity Technologies
Xaitment

ENGINE
BigWorld Client (BigWorld Technology)
CryEngine 3 (Crytek)
Havok Vision Engine (Havok)
HeroEngine (Simultronics)
Marmalade (Ideaworks 3D)
Unity 3.5 (Unity Technologies)
Unreal Engine 3 (Epic Games)

RECRUITER
Aardvark Swift
Amiqus
Avatar Games
Datascope Recruitment
OPM Jobs
MPG Universal

CATEGORY: STUDIOS

NEW STUDIO
Thechineseroom
Big Bit
Bossa Studios
ShortRound Games
Six to Start
Toxic Games
We R Interactive

MICRO STUDIO
Thechineseroom
Dakko Dakko
Mobile Pie
ShortRound Games
Six to Start
Rodeo Games
Tanukii Studios/Room 4 Games

BUSINESS DEVELOPMENT
Mind Candy
Zattikka
Playground Games
NaturalMotion Games
Stainless Games
Rovio Entertainment
nDreams
Wargaming.net

INDEPENDENT STUDIO
Blitz Games Studios
Bossa Studios
CCP
Crytek
Frontier Developments
Mediatonic
Preloaded
Rovio Entertainment

IN-HOUSE STUDIO
The Creative Assembly
EA Dice
Rare
Red Lynx
Rocksteady Studios
TT Games
Ubisoft Montpellier
Bigpoint Hamburg

CATEGORY: SPECIAL AWARDS

DEVELOPMENT LEGEND
As previously announced, the winner of this award in 2012 is David Perry, who will attend the ceremony in July.

GRAND PRIX
Our final prize, decided solely by the Develop team, is awarded to the European games studio that has made the biggest impact on the business in the last 12 months.

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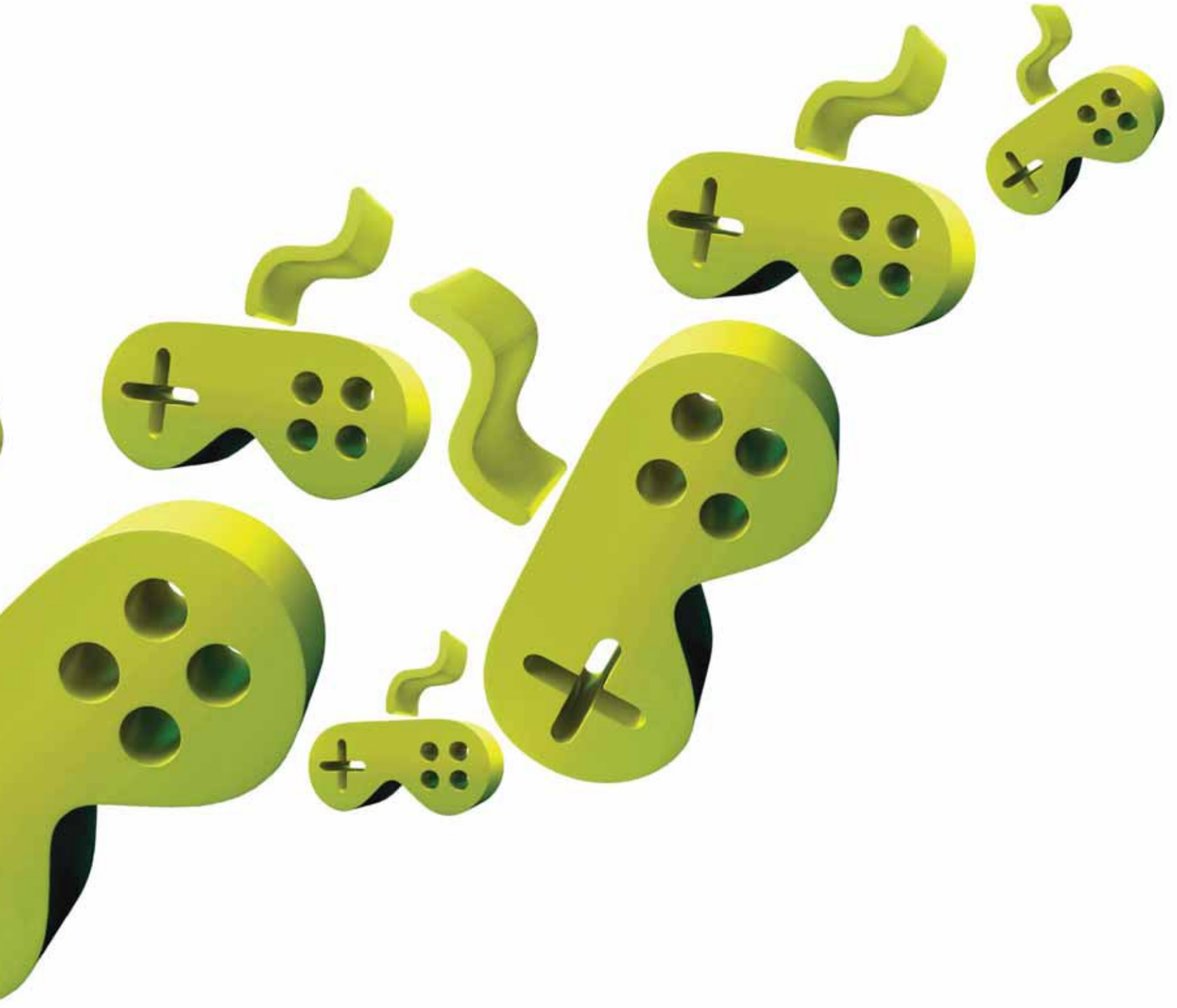

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*Sources: Arab Media Outlook 2010. Media on the Move 2009. A.T. Kearney. Introduction to Gaming. Michael Moore. Screen Digest. IDC.

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//COMMENT: BUSINESS

What a relief?

by **Rick Gibson**, Games Investor Consulting

Image credit: The Prime Minister's Office

The traditional unveiling of the UK Chancellor of the Exchequer's iconic red case for the UK budget this year introduced games industry tax-breaks. But who will benefit?

AFTER MANY YEARS working on tax relief, 'Games Up?' and successive TIGA reports, the announcement about tax credits for UK games production in the latest Budget was exhilarating for Games Investor Consulting.

But as the dust settles, the initial consultation is published and talks about real implementation begin. What will the breaks actually look like? The Treasury must craft a workable relief assisting all kinds of studios from a limited pot, probably by reworking film tax breaks legislation, possibly with some uncomfortable or even unanticipated pitfalls.

The first pitfall is how much funding is actually available. Film tax relief, the largest constituent of Government's ~£250m public financing of film annually, is uncapped and averages around £100m a year. The Government has signalled that games tax breaks could cost £50m over two years.

Assuming the relief rebates 20-to-25 per cent against 80 per cent of development expenditure (like film tax relief), this allocation means projects worth roughly 40 per cent of the UK's total development expenditure could successfully win tax breaks. Unless the pot is increased – possible but difficult in the current climate – the reality is that there will be far more failed applicants than successful ones.

THE FRENCH CONNECTION

There's a more fundamental issue: because unrestricted state aid is illegal in the European Commission (and WTO), the best way to deliver a legal tax relief is to employ a cultural test with a 50 per cent-plus failure rate. The French tax relief was only accepted by the EC after it was reworked to reduce how many productions could qualify to under 50 per cent. So, UK games tax breaks will probably be failed by Brussels without a cultural test carefully designed not to pass every applicant. That means that no studio can rely on a successful application.

> ***If written badly, the UK tax breaks cultural test could deliver a bizarre selection of worthy, uncontroversial and dull but culturally-appropriate games.***

Similarly, no studio can assume its project will automatically pass this test. The cultural test for film tax relief is administered by a team of three non-specialists at the British Film Institute. With watertight confidentiality unbroken in 15 years, this non-partisan team sidesteps any accusation of conflict of interest (for example, from an advisory committee of film luminaries), reducing cost and complexity by employing as objective a scoring mechanism as possible. It's likely games tax relief will be administered the same way.

Equally, the funds available may not match the number or value of applying projects. If it's not increased, then the allowance could either be used up before year's end or be made available in tranches. The former means disappointed studios towards the back-end of the year and rushed proposals to get in before an actual or perceived deadline. Tranches mean that larger budget titles may not be able to apply as the allocation could be too small. It's unclear whether the allocation includes animation companies (whose productions may well pass a cultural test at higher rates than your average game). Either way, a big squeeze is likely.

AN ECONOMY OF SCALE

With such a restricted pot, there's higher likelihood that bigger budget titles could eat up most of the allocation. The reported £15m pot in 2013 equates to total development budgets of successful applicants of £75m-to-£94m. It won't take many medium-big budget console games to wipe out the entire 2013 pot for the rest of the industry.

The dilemma for the Treasury is whether to restrict the maximum size of budgets until more money is available, limit the number of console titles/tranches, cap the relief available per project over a given time frame or introduce a cultural test that favours original IP over the sequels that could easily account for the lion's share of the pot. Either way, small studios or the large ones will complain.

The film tax credit will need careful reworking to be appropriate for games via close consultation with the industry. The timing, scale and criteria of the relief; the requirement for early notice to successful applicants; confidentiality of applications; the cultural test itself; the timing of funding availability; the applicability of on-going productions where the bulk of development expenditure is post-launch; rules for special financial instruments; whether to follow the French €150,000 minimum budget or risk lowering the minimum budget below the point where the tax breaks' administration cost outweighs the value of the relief given: all will need checking. Take the cultural test. If written badly, it could deliver a bizarre selection of worthy, uncontroversial and dull but culturally-appropriate games.

Some of these issues will be alleviated by the gradually increasing budget, and the industry should vigorously argue for a higher initial allocation. Others will need a cold hard look at what's deliverable to whom on what terms. Whatever happens, this relief will be no blank cheque.

Rick Gibson is a director at Games Investor Consulting, which provides commercial check-ups, strategy and data to games, media and finance companies.
www.gamesinvestor.com

//COMMENT: TRENDS

How much free time is really free?

by **Ana Kronschnabl,** Fluffy Logic

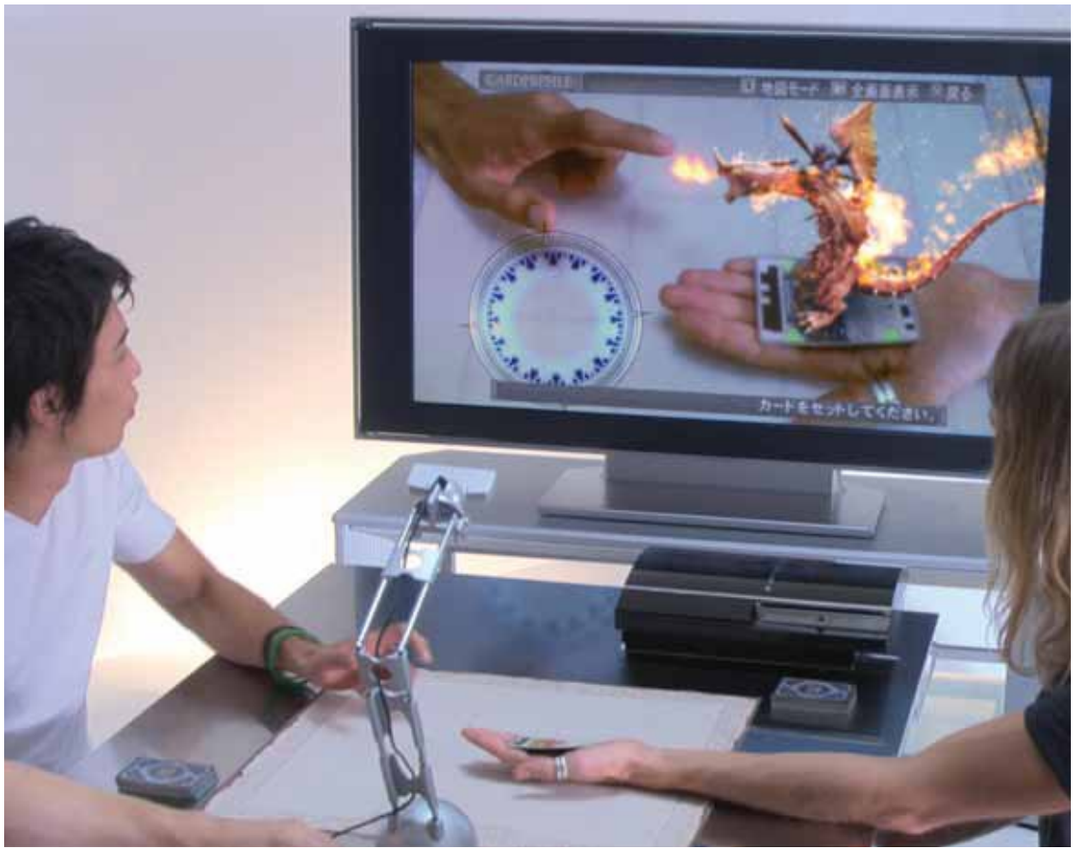
IT SEEMED, in the halcyon days of my youth, that I had shed loads of free time. My summers really did seem to go on forever.

Of course, this now seems like aeons ago: part of a golden age that could never return. But why should that be? Sure, I have responsibility, I have a house, a kid, cat, fish blah blah... But still, at the end of my day, I should have some 'me' time, as they say. I don't have to go to the well to fetch water, I don't have to hand wash clothes and put them through a mangle.

What I am saying, is that technology has allegedly set me free. From the onset of the first white goods, my life was given back to me, apparently.

But somehow, I haven't noticed.

The truth seems to be that all that has actually happened is that my life has actually sped up. My expectations of what I can achieve in a day have been adjusted and now I just do more. We are all familiar with the idea that we are now all available any time, anywhere. So now, I don't just have the house and the fish, I also have Facebook to check and tweets to make, email, texts, etcetera. You could say these are choices, and, to a certain extent, they are. However, an interesting thing seems to be happening to quite a few of the people I know. They seem to be un-networking themselves; they are removing themselves from Facebook.



Eye of Judgement might just have been an early sign that 'real world' interaction is attractive to the Twitter generation

SOCIAL UN-NETWORKING

The concept of social networking seems so integrated into general day-to-day living that even John Prescott accepts 'the social networks' – quaint – and 'the tweets' as part of his every day life. As *The Guardian* noted in a recent article: "In an interview with PR Weekly, David Prescott even claimed that his father's promotion of the #welovethenhs hashtag via Twitter amounts to 'the first successful domestic Twitter campaign to push an issue into the mainstream'."

This is obviously, to a very large extent, the kiss of death to any trend.

If we think about the technologies that arrived to free us, one that instantly springs to mind is the washing machine. Washdays have changed from being group activities where people gathered together, washed, hung their clothes out and then ironed them – together. But devices have intervened here in a big way. The sociable activity of washday has changed into a solitary domestic chore; one we do whilst also cooking dinner, checking Facebook and so on. Tasks that took all of our concentration have become one of the things we do whilst doing something else. Certainly, if nothing else, we have become a world of multi-taskers.

Thinking of all of my technological pursuits; is liking my friend's birthday on Facebook, their latest photo and so on really a replacement for a cup of tea and a chat? Do we really believe that sitting behind a keyboard, a monitor, and a computer is making us social and sociable?

> ***"What I am saying, is that technology has allegedly set me free. From the onset of the first white goods, my life was given back to me, apparently."***

So, maybe the future of new technology is that we turn off, not on. If we want to talk to someone the tech is there, but we go backwards a bit. We de-friend the 2,542 friends we never talk to and start hanging out in 'real' space.

But truthfully, I am not sure that I could actually let go of all of these additional layers of interaction. My ideal situation would be the 'Gibson-esque' view of technology; where the functionality of interaction is so seamlessly integrated into my 'real' life that it eventually becomes invisible.

REAL GAMING

From a gaming point of view this seems to be moving ever nearer. If we ignore the rather bizarre advances of functionality such as a touch-sensitive back screen, ways of interacting with games has moved on in leaps and bounds. It may be in its infancy, but in VR games such as *Eye of Judgement*, being able to battle opponents by pointing a camera at my deck of cards and watching my monsters battle it out on the screen in front of me was awesomely cool. And I am bearing in mind that unless I have overhead lights with the power of the sun this tech has a way to go.

This kind of interaction is moving, gradually, nearer to my ideal: Where I interact with devices by grabbing them from a floating graphical representation in front of me, and like Scottie before me; I can walk into a room and say 'computer' and that is as far as I need to adapt my real self to engage with the future world. But, would this deliver up the free time we all seem to be so lacking in? Somehow I doubt it.

Ana Kronschnabl is CEO and creative director at games and digital content studio Fluffy Logic, which has produced titles for a wealth of platforms across console, mobile and online. Fluffy Logic is currently at work on social game *UrZoo*. **www.fluffylogic.net**

//COMMENT: MOBILE

IAP tips and tricks

by **Will Luton**, Mobile Pie

Mobile Pie's game for TV show Misfits uses narrative hooks that can serve to encourage IAPs

IN-APP PUCHASING is here to stay. It isn't a fad. Or a buzzword. It changes the format of the negotiation with our fans. No longer is it buy the ticket, take the ride, but tune in and drop out, and spend on the tidbits we offer, that you like.

Games are marketing campaigns for IAPs. They need to be engaging and show value before you can ask for the money. Knowing how and when to ask is key to not alienating your audience.

Struan Robertson, product manager at NatrualMotion, recently said "monetisation is all fields". He's right, so let me draw you a map.

RETENTION

Getting and keeping players engaged in your game is essential. They have no time or financial investment from the outset if your title is free, so don't expect them to sit through lengthy tutorials or boring dialogue. Grab them, show them the basics, tell them their goals and let them get on.

Make the mechanics very sticky, either by sessioning (kicking the player out after playing for a set time, as in *Farmville*) or by making it one-more-go addicting (see *Bejewelled Blitz*).

Other options include narrative hooks (see our title *Misfits: Community Service* for E4) and commitment contracts - the need to respond for another player to progress - which are hot following *Draw Something*.

Retention is so important many social studios now beta test without IAP.

SOCIAL PROOF

When McDonald's opened in the UK in 1974 their restaurants featured floor-to-ceiling windows, so passers-by could see how burgers were eaten without cutlery. This was a form of social proof.

> ***"Games are marketing campaigns for in-app purchases. They need to be engaging and show value before you can ask for the money."***

When loading *Farmville* parades swanky farms, whilst in-game there are incentives to visit friends. It is showing what can be achieved, sets competitive tension, and normalises the idea of IAPs.

THE NO-BRAINER FIRST DOLLAR

From their first IAP purchase a player is invested and their spending is likely to continue. But the first purchase is the hardest to make. *Jetpack Joyride* offers double points forever for 99¢. There is no grind for that perk, only payment. To a fan that 99¢ makes total sense. Nicholas Lovell calls this the "no-brainer first dollar".

CONTROL YOUR LIMITED RESOURCES

You control your game's economy. Be too generous or too stingy and you will kill any hope of benefitting from it.

For example, if you have a hard currency (most commonly bought), give some to the player upfront, get them to spend it early on – perhaps in the tutorial. Only then allow the player to buy more.

This applies not just to virtual economies, but anything linked to an IAP.

WHAT TO CHANGE FOR

Most common purchases, whether made with a virtual currency or directly, can be categorised as: convenience, competitive advantage, personalisation or content.

Convenience is anything that will leap an artificial barrier in the game. Normally this is offered to overcome a session play mechanic, such as the way fertiliser can be used for an instant harvest in *Farmville*.

Competitive advantage makes the game easier for a player in a comparative (i.e. leaderboard chasing) or zero-sum (one winner, one loser) game. It needs to be carefully used so as not to break balance.

Personalisation is almost always linked to avatars or spaces. Hats, hay bails and that kind of thing.

Content (Also known as DLC) is a console world favourite and most effectively used in high-dedication skill games, such as FPS or driving titles. On mobile or social, new content for free is expected. If it isn't forthcoming, there's plenty else to play.

ADVERTISING

I dislike advertising in games, but the numbers can't be ignored. You can expect as much as 5¢ a day per user or more. The placement and usage needs to be such that either they're inoffensive, or enough of a nuisance that they the player will pay to remove them (a convenience IAP).

WHERE NEXT?

The usual caveats apply – the list provided here is neither exhaustive nor final. In fact, it will be dated in under six months.

But that's what's makes IAPs an exciting place for both designers and entrepreneurs. You can fast follow Zynga or Eastern publishers, but that will put you along with everyone else. Learn the rules, work out how to break them. It's all fields.

Will Luton is creative director at the award-winning boutique studio Mobile Pie. They create delicious own IP and work on licenses, with a partner list that includes the BBC, Orange and Hewlett-Packard. Follow Will on Twitter at @will_luton, or visit **www.mobilepie.com**

//COMMENT: STUDIO MANAGEMENT

Acquired independence

Tim Heaton, The Creative Assembly

WALT DISNEY ONCE said: "Mickey Mouse is, to me, a symbol of independence. He was a means to an end. He spelled production liberation for us."

Creating and owning a successful IP and being able to control it is the Promised Land for any product development. If you're in that position, take a moment. Stop reading, sit back and savour that freedom. Most teams doing product development in general and games development in particular don't enjoy that liberty. Even if you're independent you may have publishers, investors or other interested parties all contributing to the control of your company and your creations.

Here at The Creative Assembly we're not independent. We're owned by Sega. But we do feel in control of our games, and as in control of our destiny as anyone can be.

A TOTAL HISTORY

CA created *Total War* twelve years ago as an independent developer, and Sega bought us in 2005. *Total War* was already established and since then we've always been allowed to direct the high level goals for the game ourselves. We've slowly and carefully kept the capability of the team whilst building the ability to do more, including a major *Total War* release every year for the past four years, with two 90 per cent Metacritic ratings. We've upped our production skills and added to our experience for scoping and prioritising more effectively.

However, recently we've started to change the relationship with our publisher. We've built infrastructure within the studio that typically resides outside – whether that be an owner or a publishing partner.

We've extended our QA ability. The traditional way of finishing triple-A games is to spend the last few months sharing builds with a big QA team at the publisher. Sure, there'll be some studio QA to smoke test builds, but primarily the work has been done by tens or even hundreds of people testing possibly hundreds of miles away. Now though, games are less and less about the one-off shipping of boxes. We have a regular plan for extra pieces of content, and we have teams running in parallel. There's rarely any downtime. Given that the most valuable way of testing is throughout development and that testing is best done by experienced people who have been trained in 'the CA way' and who have an encyclopaedic knowledge of *Total War*, it's made sense for us to build a significant QA department around *Total War*.

> ***"At The Creative Assembly we're not independent. We're owned by Sega. But we do feel in control of our games, and as in control of our destiny as anyone."***

We have multiple PR roles within the studio. Not only do we need to promote our games; we need to PR Creative Assembly too. We've never really had a high profile as a studio. I think that comes from an attitude of letting the games speak for themselves, but in a world where we need to recruit fairly aggressively, we need to be seen and heard.

DEFYING CONVENTION

In a big departure from the norm we now manage our own marketing for *Total War*. What we found was that the publishing marketing team would move from game to game, and typically have multiple titles to deal with at any one time.

They worked to a plan set well before release, to culminate with a big sell-in on the first day of release. We wanted to have follow-on and opportunistic marketing, be more social and community facing, and we wanted to be more scientific in understanding what worked and what didn't.

We wanted people who understood our customers and our game. Games marketing is now quite metrics driven, with much analysis of consumer awareness and purchase intent on sites like Gamespot Trax.

We've recruited our perfect marketing team, and we've bolstered the development team's ability to support them with assets. We can discuss marketing and PR issues every day, and react quickly to ideas and drive them to an actual action really quickly.

Total War allowed us this independence. Sega understands the franchise is strong enough to do this. For global strategy we still work very closely with our publisher and owner, but it's reassuring for us to know every morning there are people waking up thinking only about *Total War*.

Tim Heaton is studio director at The Creative Assembly, the UK-founded studio behind the acclaimed *Total War* series of PC games, as well as numerous other works including original and licensed products. **www.creative-assembly.co.uk**

The Creative Assembly's internal marketing team has allowed for an acute focus on Total War

THE MONTH AHEAD

A look at what June has in store for the industry and beyond

JUNE 14TH
World Blood Donor Day. All that blood you've spilled in games? It's time to give some back; some of the real stuff.

JUNE 17TH
Father's Day. A time to forget what day it is, panic, and sprint to the supermarket for socks and chocolates as presents.

JUNE 22ND
Steel Battalion Heavy Armor. The notoriously difficult series returns to frustrate gamers worldwide.

JUNE 29TH
Spec Ops: The Line. 2K sets out to innovate the somewhat tired shooter genre by introducing sand.

JUNE 15TH
Global Wind Day. Not an excuse for poor jokes about flatulence, but to celebrate wind energy, for some reason.

JUNE 18TH
Pokémon Conquest. A new take on the franchise featuring monster battles, power ups and turn-based strategy.

JUNE 25TH
Wimbledon. Get ready to turn down those TV sets as Britain shakes from extremely loud grunting.

JUNE 29TH
The Amazing Spider-Man. The 'untold story' of Spiderman's origins. You've never seen this, right?

JUNE 15TH
Lollipop Chainsaw. A zombie hunting cheerleader goes on a killing spree with her boyfriend's head, as you do.

JUNE 21ST
Go Skateboarding Day. A time to try and look cool and then realise you're too old and don't have the talent.

JUNE 27TH
GameHorizon 2012. The annual UK business networking event to connect global games makers.

JUNE 30TH
Armed Forces Day. Celebrating the sacrifices of the men and women who lay down their lives for a living.

DEVELOP DIARY

Your complete games development event calendar for the months ahead

UBIQ PARIS
June 18th to 19th
Paris, France
www.ubiq-europe.com

UbiQ is a two-day digital entertainment showcase, conference and exhibition focusing on sharing experiences from disparate industries to help each other move forward.

The event has been designed to accommodate key players in the sector such as video, music, radio, press, video games, mobile apps and books.

Attendees include Ubisoft Montreal head Louis-Pierre Pharand and former marketing director of Facebook Randi Zuckerberg, who will be presenting the opening keynote.

JUNE 2012

E3 EXPO
June 5th to 7th
Los Angeles, US
www.e3expo.com

UBIQ PARIS
June 18th to 19th
Paris, France
www.ubiq-europe.com

GAMEHORIZON
June 27th to 28th
Newcastle, UK
www.gamehorizonconference.com

JULY 2012

DEVELOP CONFERENCE
July 10th to 12th
Brighton, UK
www.develop-conference.com

DEVELOP INDUSTRY EXCELLENCE AWARDS 2012
July 11th
Brighton, UK
www.develop-online.net

MONETISING MOBILE 2012
July 12th
London, UK
www.mobile-ent.biz

AUGUST 2012

EDINBURGH INTERACTIVE 12
August 9th to 10th
Edinburgh, UK
www.edinburghinteractive.co.uk

GDC EUROPE
August 13th to 15th
Cologne, Germany
www.gdceurope.com

GAMESCOM
August 15th to 19th
Cologne, Germany
www.gamescom-cologne.com

SERIOUS PLAY CONFERENCE
August 21st to 23rd
Washington, US
www.seriousplayconference.com

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thursday@3

At Ukie's thursday@3 sessions industry experts give valuable insight and guidance on a series of key business areas. All sessions are FREE for Ukie members and take place at Ukie on the final Thursday of the month starting at 3pm - www.ukie.org.uk/thursday3

10-12 July 2012 develop in brighton

On Tuesday 10th July Ukie will present, in association with the Develop Conference, a screening of Indie Game: The Movie at Develop in Brighton. Tickets are free, but strictly limited, so book yours now at www.ukiedevelopindie.eventbrite.com using the code **indiefree**

GDC 12 EUROPE

Ukie is offering a competitively priced package for representation on the Ukie organised UK Stand at GDC Europe, including tickets to the GDC Expo and gamescom. For more information contact sam.collins@ukie.org.uk or alexa.turness@ukie.org.uk.

gamescom

Ukie is offering comprehensive packages for exhibiting on the Ukie organised UK Pavillion at gamescom with match funding available from UKTI. For more information contact sam.collins@ukie.org.uk or alexa.turness@ukie.org.uk.

EDINBURGH INTERACTIVE 12

Ukie offers a 30% discount to members to Edinburgh Interactive, the two day conference on the 9th - 10th August exploring and celebrating the social, creative and cultural building blocks of the interactive entertainment and media sectors - www.edinburghinteractive.co.uk

londongamesfestival

Ukie is organising this year's London Games Festival, running across London from September 27th to October 28th. For more information and to get involved contact kirsty.payne@ukie.org.uk

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BETA

DEVELOPMENT FEATURES, INTERVIEWS, ESSAYS & MORE

The complete dev's guide to immigration

p26

Leading the way

Ubisoft Toronto's Jade Raymond on juggling being a parent with building one of the world's biggest studios, p22

Blitz on usability testing

p30

Redefining racing with ACR

p32

Region focus: North East UK

p37

> ***"Games are stuck in their smelly teen years. It's a lanky, teenage industry."***
>
> Jade Raymond, Ubisoft Toronto

Parental advisory

Jade Raymond is best known as the star producer of the early Assassin's Creed games. But now she is a working parent, a busy studio head, and wants to add more meaning to the medium she works in. **Michael French** quizzed her about bringing all three together

"I AM RUTHLESSLY efficient."

It's not exactly the first thing *Develop* expected Jade Raymond to say in our interview with her.

But then again, we're talking about something that *Develop* rarely talks about: being a parent and a developer.

Raymond is the head of Ubisoft's new Toronto studio.

But she's best known as one of the creative forces behind the early days of Ubisoft Montreal's *Assassin's Creed*.

As producer on that game, she was both the front-of-house and the ring-master, expected to talk endlessly to journalists and promote the game, then return to the studio in Montreal and stay late to get it finished.

Today, however, with a young family and another child on the way – Raymond is six months pregnant when we meet at GDC, where she is to deliver one of the event's heated 'rant' talks – it's clear different things are expected of her.

"Being a parent makes you much more efficient in your job. You simply have no choice," she explains.

"I love games and I never thought of work as work, especially when I was given the chance to create a franchise like *AC*. So I didn't think twice about working until 11pm or whatever. But once you have a kid the reality is that your priorities change.

"And I always want to do everything 100 per cent, so the only thing that goes is the slack time."

Like many other working parents, Raymond leaves work dead on clocking-off time to relish the two-and-a-half or so hours she has before her daughter goes to bed – and confesses to dipping back into emails and the like afterwards.

"You have to rejuggle your life – it doesn't go so well with the way you make triple-A big budget games, but it's doable."

Raymond has mouths to feed, then. And not just from a parental perspective when you take into account her duties as head of Ubisoft's newest Canadian studio.

PARENTAL GUIDANCE

Raymond fondly talks about the business she is building at Ubisoft Toronto like, yes, a proud parent.

And certainly, the symmetry of starting two families simultaneously isn't lost on her.

"I was eight months pregnant. I wasn't planning to move. I was just about to go on maternity leave from Ubisoft Montreal.

"But my boss called up and said 'I think you'd be good at this'. I had always wanted to try starting my own studio.

"What attracts me to it is bringing a team together from scratch, and building a great culture and atmosphere, and having the people on the team create that.

"So when I was starting up the new studio it was just as I had had my daughter. I was hiring people as I began my maternity leave.

"It was like I had two babies."

Raymond's the first to admit Ubisoft's studios come with certain child-proofing.

"We had all the benefits of being a start-up but none of the risks," she says, referring to things like Ubisoft Toronto's unique support from the Ontario government, the fact the team have been given the *Splinter Cell* IP to rebuild from scratch and also have a generous mandate to look into new IP for the studio's long-term future.

> ***"The Arab Spring, class divide, internet freedoms… why aren't there triple-A games about these topics? We can use the interactive power of the medium to provoke discussion about these subjects."***
>
> Jade Raymond, Ubisoft Toronto

Although getting hold of *Splinter Cell* was something Raymond had to get a Ubi exec to buy-in for: "The studio has a mandate to grow to 800 in ten years. So effectively it's like we have to build a really tall building. And we need strong foundations, strong IP, and need strong talent."

When Raymond discusses how she argued for that head-start in the studio's life, talk turns to issues like mentorship and nursing talent, the way one might worry about your kid's first school placement.

"To produce that kind of enthusiasm straight way you need a big IP to inspire that, so we're lucky to have that big combo."

TALENT SHOW

Ubisoft Toronto has certainly got off to a strong start, hiring in a clutch of newcomers and some people "who elsewhere might already be at the top of their career".

She quickly reels off the senior support group, including mentions for art director Scott Lee (*Prototype*, *Max Payne* and *Scarface*), film and video FX pro David Footman (*iRobot, Need For Speed*), plus creative director Max Beland and senior producer Alex Parizeau, two of the core team of 20 from Ubisoft Montreal Raymond took with her to Toronto. The team also includes people that have worked on the likes of *GTA* and *Bully*, plus other prominent triple-A games.

Adds Raymond: "What's been interesting is that they have a lot of views on what works and what doesn't – not just from a coding perspective but a studio management one. It's very useful to bring in that mix."

A GOOD UPBRINGING

But Ubisoft Toronto does eschew some market trends with a total emphasis on triple-A games.

"Triple-A isn't the easiest thing to do, but I do really love playing those games. I have this dream of what the bleeding edge is – and it's those big budget games which push tech, gameplay and narrative forward," explains Raymond.

It's actually the latter where she wants to make the biggest difference now.

Hours after our chat, Raymond took to the stage at GDC to deliver her 'parent rant', dissecting her contemporaries' lack of imagination, and demanding that the games development profession "grow up".

Games are "stuck in their smelly teen years" she said and are still a "lanky teenage industry", which has meant lots of topics are off limits for games or feel taboo, when ultimately you'd even find some of them in movies by Hollywood's king of the mindless popcorn blockbuster, Michael Bay.

"The Arab Spring, class divide, internet freedoms… why aren't there triple-A games about these topics? We can actually use the interactive power of our medium to talk about these subjects in a way that can provoke discussion about them."

She added: "But I am a realist – at $60m per triple-A game it's not likely we can make a subject like this the core of a brand new IP. Games may be stuck in this narrow genre of action shooters – but that shouldn't mean we are stuck.

"So why not weave more meaning into existing blockbusters? Maybe *GTA* could make a statement about the penal system? Or maybe games like Call of Duty could make a statement about sexism?

"Maybe *Splinter Cell* could make a statement about the ethics of interrogation?"

A DECENT EDUCATION

When *Develop* picks up this thread in conversation, Raymond's reply is resolute.

"There are so many aspects of being human that I wish games were trying to capture, but they just aren't right now."

Raymond's not really interested in making the next big social or mobile hit – that push for better triple-A games is something she advocates, not just what Yves Guillemot or

Raymond was producer and then executive producer on the Assassin's Creed franchise, which Ubisoft says is this generation's biggest new IP launch

Ubisoft Montreal boss Yannis Mallat has told her to do. But she does envy what the New World of more connected games can do, and is clearly taking notes.

"What I appreciate about those games is that you can take risks. There is scope to touch on themes that you may not want to in a triple-A game. PSN and XBLA games can approach a difficult subject matter that is not wrapped up in a $60m budget."

Her blue sky game design examples show she's had the topic on her mind.

"What about a game where you play a child who becomes older, their skills grow, and then have to take care of their parents?

"What about the experiences about being an elderly person – maybe not as a full game, but as a smaller game. Your skillset would contract, the opposite of all other games. Even walking to the bus stop is a challenge.

"Games could be great to explore how stacked up against the poor the system is – once jobless, in debt and without healthcare life becomes hopeless."

Thoughtful ideas ripe for the next hip indie game, but Raymond wants to see that stuff in a games blockbuster.

COURAGE OF CONVICTION

But to play devil's advocate. Can Raymond really instil that kind of thinking into a brand like *Splinter Cell*, which is fixated on silent takedowns and choking guards to death?

"Yes. Everyone in the studio wants to do something new and innovative. And Ubisoft supports that. Our chief creative officer is always asking us 'What is the meaning here? What are you trying to say?'"

Raymond says that she'd love to see each new game provoke its players, but that won't happen immediately. It's baby steps for the rest of the medium: "The first step is to add that into existing blockbusters, it's easier to do it this way than introduce a new IP and be riskier with your content and your message. And in the new *Splinter Cell*, there is a concept at the core of the franchise that can be given more meaning."

> ***"The new generation of gamers does want to learn, and think, beyond learning new button combos."***
>
> Jade Raymond, Ubisoft Toronto

A key part to Raymond's argument is how her extended family at Ubisoft Toronto are all kindred spirits collectively hoping to add these more socially responsible elements to what they create.

"There are a lot more people who are looking for more out of their games. The new generation of gamers does want to learn, and think beyond learning new button combos.

"It is easy for us, as the Gen X'ers who are having kids, thinking that we want a bit more content. But when I hire these Gen Y and Gen C kids, or whatever you call them, it's clear they care even more. I think the industry is grossly underestimating what our audience wants from games. Players want to know more about social causes.

"And developers want more, too. I had someone come to my office recently and he said he wanted to leave the games industry because it's all about shooting people – he wanted more meaning in his life and in his job. It's actually common for the younger generation to say that. Us older developers have to give it to them.

"Older developers are just used to what the industry does. When we were young, it was just a cool achievement to get something to explode on screen. The new guys, they want that to count for something. And so do I."

WIDENING THE GENE POOL

And this can happen even quicker with a more diverse game development workforce, says Raymond.

"When I have a team and it's all guys wearing the same baseball cap and t-shirt I think that is a risk," she says. "They can create games for other people like them, which is fine, but it's harder to have fresh ideas when you and your colleagues fit the same profile.

"What can a bunch identical, white, 32-year-old males who shop at Gap or wear the same free games T-shirt offer that's new?

Slowly, she says, that is starting to change.

But her tone suggests it needs to happen sooner. Raymond experienced first hand how the industry needs to embrace diversity. Some quarters of the media and the industry became disproportionately fixated on her gender and looks when she was out and about demoing the first *Assassin's Creed*.

Plus, as a female games developer, a female studio boss no less, she is still in a minority. She flips that topic into a broader one about the ageing games workforce to prove how there is some change afoot.

Says Raymond: "When I started at Ubisoft I had just turned 29. The average age of the studio was younger than me. As time has gone on, the average age of employees has gone up to older than me. But it took less people to make games back then – the older developers are still there, they are just outnumbered by all these kids."

All roads lead back to the new generation Raymond wants to see inspired towards making better, more relevant games. This is a barrier she wants the industry to collectively smash through.

"The industry is still really cagey about featuring touchy subjects, and the industry gets touchy if you consider its products are interactive. When you're not just watching something and are a participant it creates uneasy questions. The industry hasn't answered yet. It has to, though.

"We may no longer be the audience of our games now, but we mustn't underestimate the next generation. Responsibility falls on the seniors in the industry – and we need to give it a kick in the pants. Because games will grow up to become the mature industry we all thought it could be."

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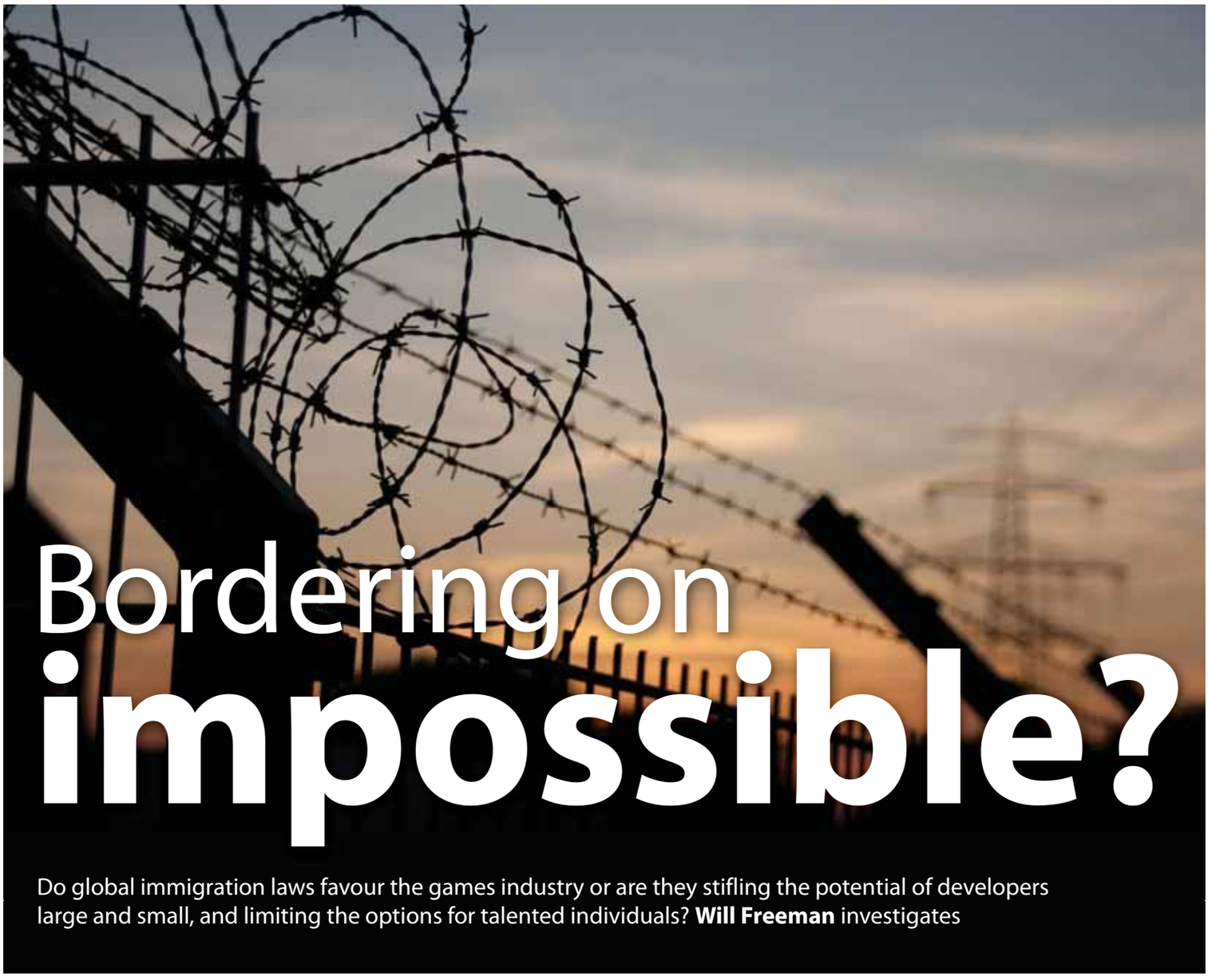

Bordering on impossible?

Do global immigration laws favour the games industry or are they stifling the potential of developers large and small, and limiting the options for talented individuals? **Will Freeman** investigates

The obstacles to developers looking to work overseas can seem insurmountable, but they can be bested

ACROSS THE GLOBE immigration is a complex and contentious issue.

Outside the games industry it is a favourite of tabloid newspapers, a polarising point of debate at dinner tables, and the subject of countless legal tomes.

Within the realm of the games development business, it's just as delicate a matter. Many argue that excessively stringent immigration law has a chokehold on studios and individuals alike, stifling creativity and moneymaking abilities. Few employed in making games begin their career with learning the nuances of global legal systems in mind, and for many the subject goes ignored.

Immigration laws change at a tremendous rate, and vary so much from country to country that it is near impossible to comprehend the entire situation. But for a developer there is hope. In realising the core issues, challenges and solutions, you can begin to negotiate the immigration maze, and perhaps even become a more productive studio for your efforts.

A SPECIALTY CASE

At the root of the problem for the games industry is the depth of specialty many roles require. Take this example from OPM Recruitment, which has placed talent in roles all over the world, giving it vast experience of helping individuals with the legal details of crossing national borders for work.

"We recently did a survey for a client looking for a games designer where we discovered that there were only 18 people in the whole of Europe who could do the job, and all were already gainfully employed," explains OPM's owner Kim Parker Adcock. "We need to be able to look outside the EU to find these kinds of rare people, and know that our clients can actually bring them in to the UK to bolster their companies. It makes no commercial sense for our Government, whose job it is to make 'UK Ltd' profitable, to not make this happen."

And there it is, a problem as old as the games industry itself, and prevalent across the globe; proving the value of the business to governments.

What studios must do to address that issue is better their understanding of the fundamentals of the immigration process.

Of course, immigration laws were not conceived purely to irritate games makers. They are in place for a worthy and important reason; namely protecting the rights of the individual moving abroad, and securing countries' populations and economies. In that context, they favour highly skilled workers who will contribute to the country in which they make a new home.

"Any studio looking to hire the best and brightest people needs to make it their business to know how border agency policies work, and how to use it to their advantage," advises Emma Cole, recruitment and HR assistant at *Total War* studio The Creative Assembly.

While fully aware of the challenges immigration laws bring, Cole has an optimism many would be wise to adopt. Learn the relevant laws, and be confident in your studio's abilities and needs, and you can overcome the hurdles that employing from overseas can bring.

QUESTION TIME

While the situation can vary wildly from nation to nation, in short, many border agencies want to know three things:

- Is your business a genuine organisation operating lawfully?
- Are you a dependable employer?
- Are you capable of carrying out your duties as a sponsor (taking responsibility for a migrant joining your organisation)?

Almost all in games development should be able to answer those questions positively, and at a fundamental level, absorbing talent from further afield is an absolute possibility. But to ignore the challenges that cause so many studio bosses a headache at the mere mention of immigration would be unwise.

As mentioned above, immigration laws constantly flex and change, and across the world there are almost daily updates to the rules that govern employment across national borders. In fact, such is the problem that it is a key issue for major legal firms specialising exclusively in immigration, such as Fragomen LLP.

"The truth of the matter is, the UK system can work better than other immigration systems across the world," says Caron Pope, managing partner at Fragomen. "Unfortunately, an insistence on layering change over change has reduced business confidence and created a complex and confusing policy framework".

Add to that constant state of flux a system dictated by reams of time consuming red tape, and you've got a situation that, particularly for smaller studios, can seem near impenetrable.

"The biggest problem for us at the moment is the lengthy process and lack of transparency about lead times," explains Ella Romanos, MD of online and mobile specialist Remode Studios. "This means that once you have found someone you want to employ, they have to wait several months to find out if their position can be confirmed by the Border Agency, during which time they have no guarantee of a job. It also means it's difficult to schedule work because we don't know when new resources will be available."

PEOPLE POWER

There are, however, positives to be found in the world of immigration law, especially in favour of the individual. While brain drains like Canada are understandably viewed as a the cause of the problem by many in the games industry, they do provide an opportunity for work, and are not alone, with numerous emerging markets offering refuge for those looking for a fresh start.

"Canada and the US remain dominant in their ability to attract the highest calibre candidates given the size of the industry and incentives," offers Jagex talent acquisition manager Peter Lovell.

> ***"We recently discovered that there were only 18 people in the whole of Europe suitable for one role."***
>
> Kim Parker Adcock, OPM

"There are many opportunities for Western professionals in the Eastern markets, especially Singapore. There is a vibrant social games development scene in Spain and Southern Europe where we are seeing competition for our talent emerge."

Emerging markets are certainly cause for equal optimism and concern in terms of immigration. If you're an individual, it may be worth going to countries with relatively open borders. If you're leading a studio in a country with an established industry, you'd do well to keep an eye on these potential brain drains.

"The emerging markets in Brazil, Russia, India and China are of a particular interest," adds Cole. "There's a great deal of talent in these countries, particularly in the art and programming discliplines."

Lovell and Cole are by no means alone in their opinions, and together they identify names we are likely to see far more of as an industry in the coming months.

And, it transpires, even that powerful magnet for games industry talent that is Canada sees homegrown devs move elsewhere, with several weaving a course through even the notoriously tough immigration laws at the boundary of the country's southerly neighbour.

"It seems that our country has good measures and competitive salaries for people in the industry. It could be quite attractive for foreign staff," says Géraldine Philippin, BI and communications coordinator at Québec business network Alliance Numérique, adding: "The US is also a very attractive place for foreigners interested in this industry. The California dream still persists, and of course it's a really productive place in the field of video games."

GO WITH THE FLOW

The flow of development talent across national borders, and the fledgling brain drains establishing themselves in emerging markets seem to prove that international immigration laws have not completely stymied the world's games industry.

Governments globally are beginning to recognise the potentialof the games sector, and while there is a lot of work to do, if the industry can collectively inspire national authorities of its worth, we may see more open recruitment channels made available.

"In the worst years of recession our industry stood still, it didn't go backwards, it just stood still. That's quite remarkable," concludes OPM's Parker Adcock. "Surely [the government] should see that as an export and opportunity for income generation in such tough times our industry is frankly outstanding. But we can't make or publish product without the right people to make it."

An effort is needed, then to get the right people in the right countries.

Helping talent cross borders (top-to-bottom): Fragomen LLP's Caron Pope, OPM Recruitment's Kim Parker Adcock, and GameCity:Hamburg's Stefan Klein

IMMIGRATION CASE STUDY: HAMBURG

WHILE IMMIGRATION practices are rarely something developers speak of fondly, in Hamburg – and across Germany – the laws surrounding moving talent over national borders are, relative to the wider EU community, fairly liberal.

"Currently the government is changing the law," says Stefan Klein, MD at trade body GameCity:Hamburg, of German immigration practices. "For people from outside the EU it will become easier to get a working permit here because the minimum annual income will be reduced. In the past sometimes games companies could not afford to pay requested high annual incomes. Due to a shortage of developers the administration will now be more supportive than before."

While Klein admits misconceptions about the bureaucracy surrounding German immigration laws have worried some local devs looking to employ from overseas, he is confident organisations like his own can help cut through the red tape.

IMMIGRATION CASE STUDY: THE SMALL STUDIO

> ***"We've had to submit online forms and supply company documents which included audited accounts, as well as a £500 fee."***
>
> Ella Romanos, Remode

ELLA ROMANOS is MD of Remode; a relatively youthful studio that has recently emerged as one of the UK's most visible indies. And, in her experience, the Government makes life very trying for small studios tackling immigration laws alone.

"In order to sponsor an employee, a company has to become a sponsor first through assessment by the Border Agency, who review HR policies and finances," explains Romanos of the process of looking to hire from abroad. "We first had to submit an online form and supply company documentation which included audited accounts, as well as £500 fee."

In the UK the Government currently defines which industry areas are more readily supported in recruiting from afar.

"If a company wishes to employ someone who isn't on the list of industry jobs that are encouraged by the Government, then they have to go through a rigorous process to prove that someone from the EU is not available to do the job, which can be costly," explains Romanos.

In short, for smaller UK studios it can be very expensive, and adding advertising, potential solicitors fees and various other hidden costs only amplifies the problem. Remode has remained persistent, but time and money are commodities rarely in abundant supply at any studio, especially a small indie.

IMMIGRATION CASE STUDY: QUÉBEC

> ***"Those with a diploma in a specific computer science course will obtain more points in their evaluation as 'skilled workers'."***
>
> Géraldine Philippin, Alliance Numérique

CANADA IS of course famous for its ability to attract talent from all over the world; a situation that has made a it a villain in many observers' eyes, and an example of excellence to numerous others. Québec, home to giants like EA and Ubisoft, is one of the huge nation's leading provinces for games development, and its authorities have done much to support games makers looking to move their studios to the area.

"There are some measures taken by the government to promote the venue to people in the software industry," explains Géraldine Philippin, BI and communications coordinator at Québec business network and trade body Alliance Numérique. "The immigrants who want to work permanently in the province of Québec and have a diploma in a specific computer science course will obtain more points in their evaluation as 'skilled workers' than people with a different school background."

While Philippin recognises that Québec's immigration laws are far from simple, she is confident that the support offered in the area more than compensates for the complexity of the process. She also recommends to any developer considering a move to the area to attend the Montreal International Game Summit to get a feel for the province, and insists French speaking is not essential.

IMMIGRATION CASE STUDY: THE UK'S TAX BREAKS

THE RECENT news that the UK development community is set to benefit from tax breaks has done much to reinvigorate optimism about the country's games industry. In turn, that positivity has caused some developers to feel more upbeat about the number of companies that decide to tackle the UK's intricate immigration laws.

"If the recently-mooted UK tax breaks work out the way we hope, it would be great to see the establishment of more studios on home soil," says The Creative Assembly's recruitment & HR assistant Emma Cole (*above left*). "This may also encourage more indie studios and start-ups to get going in the UK, and we'd hope it would create more favourable conditions for skilled developers to consider moving here."

However, optimism must be balanced with realism; something Jagex's talent acquisition manager Peter Lovell is prepared to do.

"The incentives to work in Canada or the US are extremely good and the UK cannot readily compete," suggests Lovell, who's employer has been awarded the highest grade level of sponsorship by the UK Home Office.

"Salaries are disproportionately higher than UK equivalent roles and there are generous tax breaks that allow a greater rate of take-home pay. The opportunity to work for 'powerhouse' organisations is also appealing and a significant pull."

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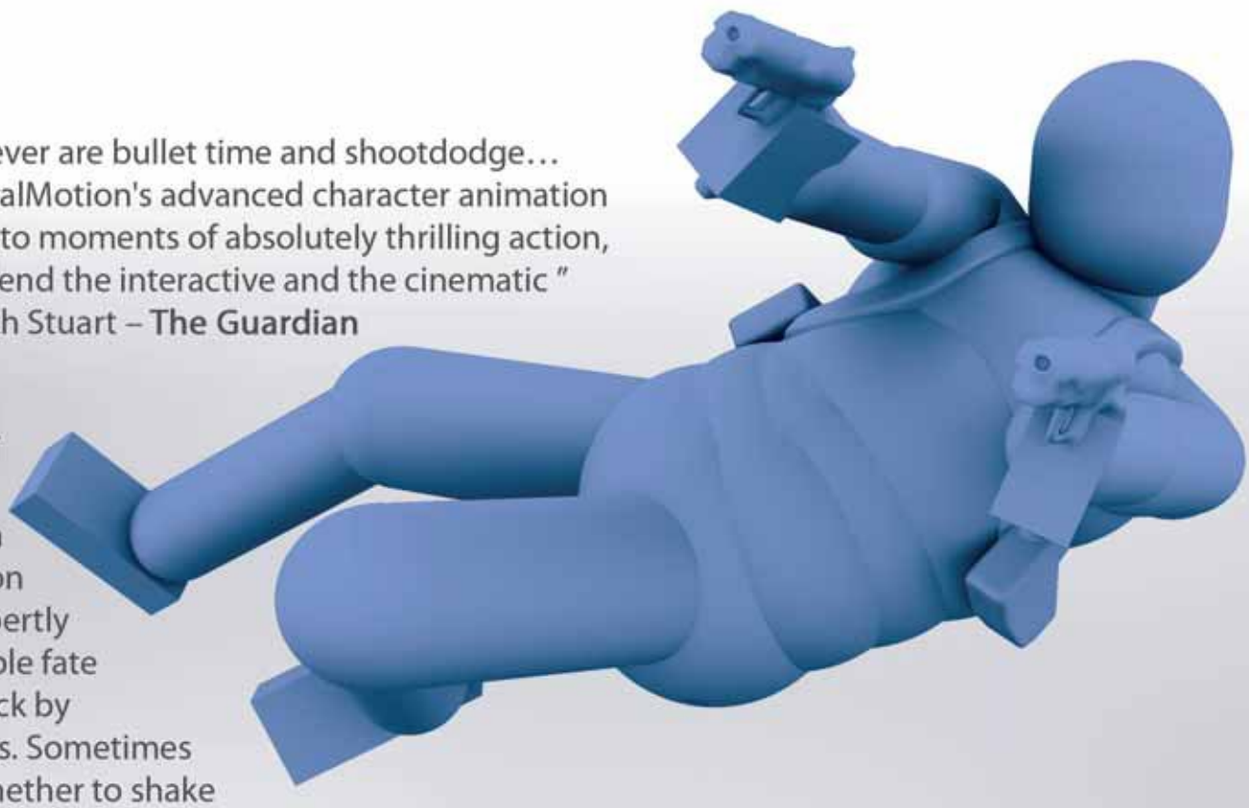

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Max Payne 3 - Keith Stuart – **The Guardian**

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Max Payne 3 - Ludwig Kietzmann – **Joystiq**

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Usability is your Power Loader

Blitz Games Studios' **Chris Viggers** believes relying on internal usability testing can lift the cognitive load from your team, leaving them to focus on the creative decisions that really matter. Here he presents his case

Illustration for Develop by Daz Watford, Blitz Games Studios

EVERY GAMES DEVELOPMENT studio worth its salt talks about the usability process itself, and how it can be integrated into the development pipeline.

What aren't mentioned are the indirect benefits associated with this. When we set up Blitz's internal usability lab in 2011 it was primarily designed to speed up the game development process, with the ultimate aim of creating higher quality titles. Whilst the lab has definitely achieved this, we found that it had an interesting side effect; it has enabled our dev teams to focus on what is really important for a game.

The usability process has helped prevent prolonged – and non-productive – discussions over features and results, and interestingly, has taken the heavy lifting out of making decisions without the correct data, opening the door to significantly increased creativity.

THE COGNITIVE PROCESS

People like to make decisions. It makes them feel like they are in control and empowered. However, decision-making can be incredibly time consuming, stressful and tiring for even the most hardened developer. In a creative industry such as ours there is rarely a clear-cut right or wrong answer, which of course usually compounds the issue.

Let's look at a definition of decision-making from this psychological perspective: 'Decision-making is a basic cognitive behaviour where people choose a preferred option from a choice of alternatives, based on certain criteria'.

Judging a decision on a set of criteria is what the usability process itself solves for us, and was the key reason for setting up the internal process in the first place. To have measurable, reliable and accurate data to help us make better decisions for our games is critical to our success and empowers our developers to make their own decisions backed up by data that can be agreed upon.

Interestingly, a number of studies (Pass, Renkl and Sweller) suggest that better decisions are made when people understand the full context of the situation and when they are not overburdened by lots of data to base that decision upon.

> ***"The usability process has taken the heavy lifting out of making decisions without the correct data."***

Trying to find answers to a problem without having a clear idea of where this problem fits increases something known as extraneous cognitive load, which is very time-consuming and tiring for the brain to process. Showing possible answers to a problem in context can reduce this load – in a completed usability report for example – and enables people to move to higher level thinking to find a working solution.

If we couple the above with the idea that interruptions in peoples' workflow affect both productivity and creativity (as explored in *Flow: The Psychology of Optimal Experience* by Mihaly Csikszentmihalyi), we can begin to hypothesise that by ensuring we make simple plans, test them quickly and then move on to new areas, we have the opportunity to enhance good decision-making, enable more advanced learning and achieve increased creativity.

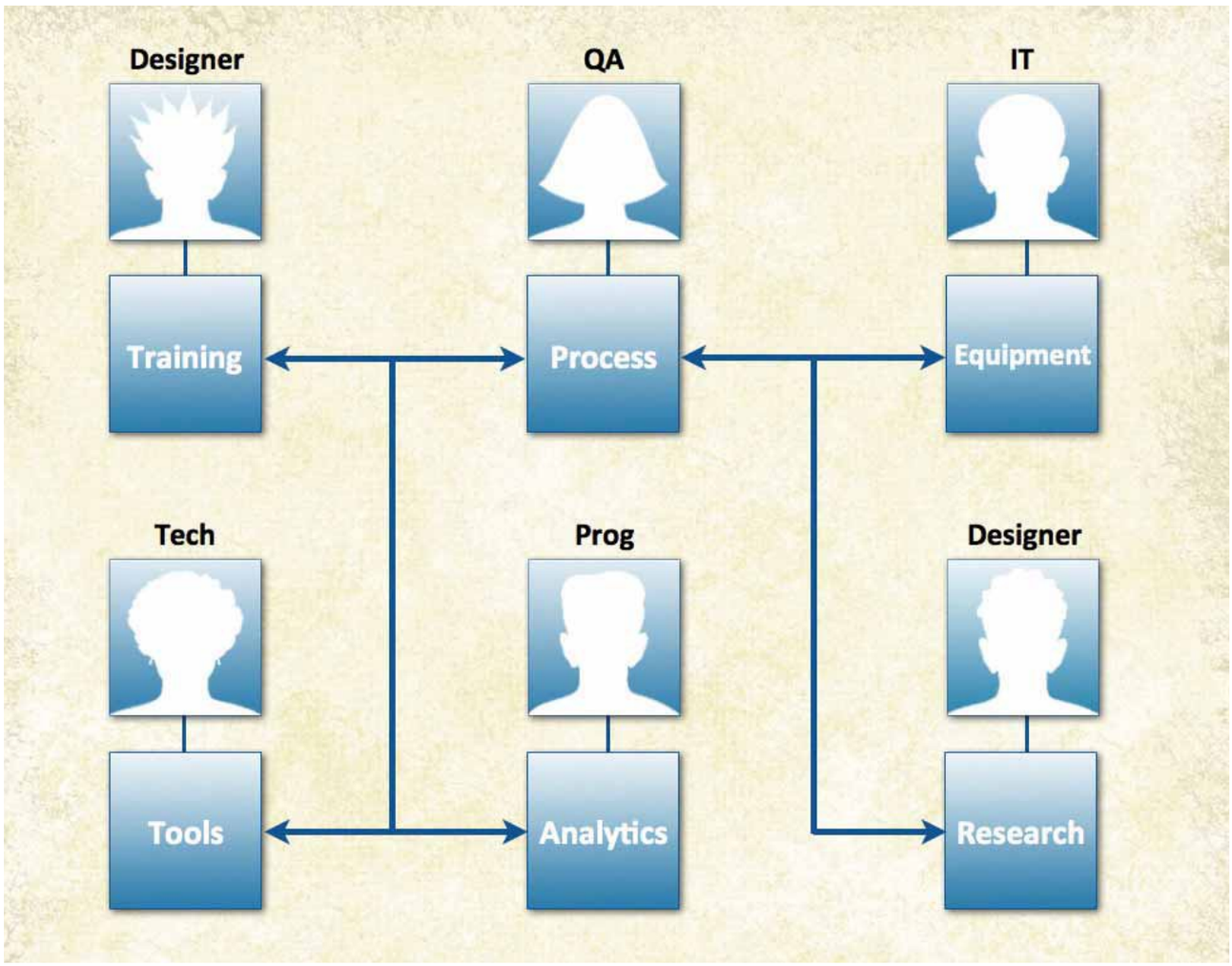
PUT TO THE TEST

As a byproduct of this, we have started to find that our developers are now testing the small, day-to-day design decisions to get the criteria they need to make choices, and then focusing their efforts on more innovative thinking and the bigger picture.

Ultimately we believe this will lead to us creating more innovative entertainment in the long term.

A great example of this comes from our work on internal IP development. We have recently been designing in-game monetisation systems, an area in which usually everyone has an opinion and where there are no clear established systems out there; two points which could warrant days of discussion.

We knew we wanted to do something different to the competition in this area, so instead of brainstorming lots of ideas and generating lots and lots of discussion, the team put together a very brief plan to put it to test immediately in our lab using real cash. This put the discussion to bed and the team



For the task of establishing an efficient internal usability testing lab, Blitz Games Studios created a cross-disciplinary workgroup (left)

immediately moved onto other design challenges whilst waiting for the results.

This proved successful in two ways. Firstly, we produced extremely useful data on our monetisation system very quickly, and saw that with a few amendments it would work very well for our game.

Secondly, the team wasn't bogged down with ever-increasing levels of detail to make decisions about (which studies show can result in worse decisions getting made) and were able to move on to fresh creative challenges, improving other areas of the game in the meantime.

THE INSIDE TRACK

Having an internal usability solution inside our studio was seen as something that would improve the quality of our games and also speed up our production processes. We have found it to be so much more.

Setting up your own internal usability lab could be seen as expensive and time-consuming but we've proved that with some careful planning, creative thinking and a very small budget, we now have an integrated process that all development teams can call upon at very short notice to test out even the smallest theories or ideas.

This has given our developers the freedom to discuss ideas and test them at will, enabling them to gather data to help them make more informed decisions. It also has the benefit of freeing up brain space for more creative and important thinking. These two side effects were never envisioned, but are very welcome additions to our studio culture.

www.blitzgamesstudios.com

Making internal usability a reality

With the current trend of large studios employing full-time usability consultants on site, Blitz decided to invest time and effort its own usability test lab, with a full suite of tools and reports, a pre-booking system, dedicated experts, and support for the game teams with running the tests and presenting reliable data.

At first this seemed like a difficult and expensive mission, but getting the right people across the studio to work together, finding quick and easy ways to test and record results and focusing on training staff in methodologies made it a lot simpler, cheaper and faster than previously imagined, thanks to a dedicated usability workgroup.

To undertake this studio change, Blitz created a small cross-disciplinary workgroup for the task (above image). The diversity and passion of this group was essential, and crossed over many aspects of the studio, from QA, design, core tech team and IT. This group was given a clear brief to focus on the equipment purchases (under £1200 in total) space (a meeting room) and process (psychology, testing methodologies). In under five weeks we had its first sessions being carried out, including a booking process, live video streaming to teams and professional summary reports.

The studio learns more and more from every test session and iterates the process each time. As an independent studio, Blitz's diverse range of games means that there are always new lessons to learn and new formats and game genres to test.

For internally developed IP it's important that costs are also kept reasonable. The fact the studio is funding the development itself, and working to ever-decreasing time-scales, means that having the resource on site is ever more valuable. For example, for a recent iOS project the team managed a six-week schedule to completion, with three usability tests per week. This could only have been achieved using internal usability resources and the quality of the end product really benefited.

The studio's next step on its usability roadmap is to feed data into the BlitzTech analytics and metrics system, so as to continue the testing out in the wild, and triple-check both internal usability practices and creative decision-making at the same time.

Chris Viggers is studio development director of Blitz Games Studios. He has over 12 years experience in managing and directing video game development teams, and practices 'leading from the front' so as to 'set standards and empower teams to create the best games possible'. Follow him on Twitter at **@vigzmeister**

Driven by social

Eutechnyx has crafted a new social free-to-play game for petrol heads. **Aaron Lee** looks under the bonnet to see what Auto Club Revolution means for both the games and car industries

Eutechnyx and BMW have high hopes for racer Auto Club Revolution

WHEN DARREN JOBLING first had an epiphany for a free-to-play racing game while watching online poker, he could not have envisioned that seven years later he would be calling *Gran Turismo's* bluff.

The marquee racing franchises maintained by Sony and Microsoft have "lost their way" he claims. Jobling argues that they are more concerned with one upping their competitors by licensing more cars, meaning their lack of creativity has left motor manufacturers – and users – with little choice but to accept the status quo.

So when *Develop* caught up with the Eutechnyx COO, surrounded by gleaming BMWs at the motor manufacturer's HQ in Munich, it was plain to see why he could not contain his excitement. *Auto Club Revolution* is Eutechnyx's opportunity to take pole position, and its ambition is such.

The unique idea, Jobling says, was to put motor manufacturers and users in direct contact – and eliminate the publisher that typically serves as a middleman. *ACR* is about communication and community. It is also about convincing users that, short of hitting the test track for real in their dream car, a browser-based, free-to-play racer is the next best thing.

ACR is pitched as a console-quality racing game, as well as a custom-built social network for auto enthusiasts. The former will run on medium-level laptops and requires a client, while the latter runs on tablets and other browser-connected devices, giving it huge potential.

In Munich, the studio introduced the world's media to the *BMW Experience* – a free online test run in the 2011 BMW 1 Series M Coupé. This was a small sample of Eutechnyx's big plan, and it sees its partnership with BMW as being the 'world's first collaboration between a motor manufacturer and a games company'.

THAT NEW CAR SMELL

Regardless of whether you agree with such rhetoric, BMW has worked more closely with Eutechnyx than previous games companies. BMWs that appear in the game were sent to Eutechnyx's studio in Gateshead, Newcastle, so its team could recreate every inch of the cars, from tread depth and handling to the sheen of metallic paint, accurately.

Simon Jones, VP of commercial at Eutechnyx, says *ACR's* appeal for motor manufacturers is this: "It brings people into gaming – and I think [this is key for] BMW. Their fans, people who are on their websites; it gives them something to do that continues to engage with their brand in a way that websites, still images and video can't do."

Sponsorship is a business model the studio sees tremendous potential in. "As our audience grows, I predict we could become the most important marketing channel for car manufacturers, or anyone that's even associatied with cars," says Jones. "You can just do so much. Cars are tactile things. You want to hear them, you want to touch the leather, you want to smell the interior; you want to really get into it. Just looking at a

THE GERMANY JOB

It's not every day that a man like Frank Isenburg, chief engineer at BMW, is involved in the development of a game that uses the cars he originally designed.

For BMW, Eutechnyx was a good fit because it showed the same level of passion for cars as the motor manufacturer. "They're very quality driven, they're car enthusiasts and they never give up," suggests BMW VP of brand communication Andreas-Christoph Hofmann.

He says the importance of games to BMW is growing in light of changing times. "It's becoming more and more difficult for us because younger target groups are interested in so many different things. So we have to react and find channels, like gaming, where we can meet them."

Engagement is what separates gaming from the manufacturer's other digital approaches, which include social media. Hofmann is especially excited about the company's opportunity to develop long-term relationships with consumers and learn from the data *Auto Club Revolution* collects.

Eutechnyx has deals that are yet to be announced with other motor vehicle companies, but if BMW's reaction is anything to go by – and, according to Jobling, it is the car industry's 'tastemaker' – other games outfits may have to raise the stakes when it comes to dealing with manufacturers in future.

"Of course, we will have exchanges with other [games] providers," Hofmann says. "I think the new benchmark will be our cooperation with Eutechnyx."

> ***"As our audience grows, we could become the most important marketing channel for car manufacturers."***
>
> Simon Jones, Eutechnyx

picture online of a car is never going to win you over. If you can give something in a virtual world away for free which is a sampler for an actual product, that's the best demo you could ever have."

For motor manufacturers, the rewards of the *ACR* model are plentiful. The online game enables them to get their brand and their products in front of younger demographics worldwide. BMW and Eutechnyx are already working toward simultaneous product reveals for motor shows such as Geneva. A cover is pulled off a car on the show floor; meanwhile it is instantly ready to be driven in *ACR's* virtual world.

And that is just the start. "We believe that we will get a lot of feedback and ideas [from *ACR*]," says Andreas-Christoph Hofmann, VP of brand communication at BMW. "We really want to take that in for further consideration or even to develop the game."

ACR gives manufacturers qualitative feedback that they can make use of. For instance, by letting the game's community choose from a selection of body colours for concept cars, manufacturers can see which colours users find most attractive and factor that into their decision-making for upcoming production models.

THE RACE FOR RELEVANCY

Even with all this sponsorship, Eutechnyx is confident that it has put users' interests first.

"Communication, particularly on social channels, is about interaction both ways," says Jones. "The console machines aren't set up for that. They shoehorn social into a game, whereas, we're building a game on the bedrock of social."

Relevancy is Eutechnyx's ace. There's bit of *Burnout Paradise* here, a bit of *Blur* there and a big helping of Facebook. What you have is a game where the incentive is not racing – it is being ranked top in your street or town, live chat and customising your car. Even the race lobby has been gamified so that it can be sorted by 'likes'.

"What we're trying to do with *ACR* is build something around ownership. We want people to invest in the cars – whether it be credits or money," says Jones. The game's two-tier structure gives users the option to build their car collections gradually, or simply pay their way.

He is keen for *ACR* to attract auto enthusiasts who do not play games, and Eutechnyx has taken care to ensure that the game's core content and social functions are easily shareable.

The flexibility of their platform also means they can create channels for motorsports, like NASCAR, which is another example of how they plan to build communities around brands.

FUTURE THINKING

On sponsorship and incentive, *ACR* looks to be a serious contender. But its biggest challenge lies in adapting to the free-to-play model it has bet its cards on.

Since starting work on the game 18 months ago, Eutechnyx's production process has become much more agile. They are now poised to react to users on an on-going basis in order to best serve the community they are building.

But regardless of the exploding trend of free-to-play games, they must overcome the stigma that console audiences have developed towards it if they want to challenge the genre's leaders. *ACR's* custom 'Racebook' will bring the buzz, but getting the user experience right will be down to experimentation.

Everything else – the in-game advertising, the limited-time sponsorship for parts manufacturers – is secondary. Their mantra, says Jones, is "get it right".

Back in Munich, Jobling surveys the event that he and his team have co-organised; BMW brass mill about between the vehicles, while journalists and invited guests crowd around a bank of demo screens running *ACR*, and once again he is animated.

"It's nice to control your own destiny," he offers. "As a content creator, it's nice to control how your content gets delivered to the end user."

Normally, a project of *ACR's* size and scope would be publisher funded and publisher controlled. Eutechnyx bet big. It has taken three studios and something over 150 people to get *ACR* to this point. Of course, the real revolution is the power shift that this project signals.

"We saw it as a way of expressing who we were and what we were interested in as a company," Jobling says about the studio's decision to develop the game. "It will cement the future thinking of the company."

www.autoclubrevolution.com

Eutechnyx COO Darren Jobling (top), BMW's Andreas-Christoph Hofmann (middle), and Eutechnyx VP of commercial Simon Jones

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It's good up north

Lingering stereotypes about England's north-easterly counties paint a bleak picture. But the region's developers insist that as a studio hub the area is booming. **Will Freeman** quizzes a cross section of the local dev scene

The North East region's finest talk over the merits and challenges facing the resilient games development hub

Is there a particular company model or type that thrives in the North East? What makes the hub what it is today?
Gareth Edmondson, CEO, Thumbstar Games: Here we have studios and businesses of every size, so we have everything from small teams through to triple-A studios like Ubisoft. The area has a huge number of mobile studios.

In recent years we've seen a lot of new start-ups, especially in mobile and online. Certainly here in the North East, it feels like a rebirth of the industry. 20 years ago there was a real cluster of developers here, and it had stagnated for a while, but right now there's a feel of a real return here.

Darren Jobling, COO, Eutechnyx: Definitely. And I'd say it was a bit of a 'natural cluster' in the North East, in that it all goes back to a place now known as the Newcastle Discovery Museum, where all the current heads of the companies used to meet. It was this place where computer games people came together, and it's part of the heritage of the industry here. The history of the North East hub goes way back, and it's not really a university hub as many people think. This place started as an entrepreneurial hub, and that history is really important to today.

But what about companies new to the area, such as CCP. What's the appeal?
Richard Smith, Technical Director, CCP Newcastle: I guess I'm a bit of an outsider, in that I worked in London and the South East until about five years ago, until I moved up here to work at Midway Newcastle.

> ***"Certainly here in the North East, recent years feel like a rebirth of the industry."***
>
> Gareth Edmondson, Thumbstar

CCP is a new player here, and for CCP the appeal of the region was all about the area's talent. It goes back to that heritage here that's been in place for 15 or 20 years. And particularly, I think, on the technical side the talent is very strong. Real games programming is embedded in the region.

Giselle Stewart, General Manager, Ubisoft Reflections: I'd agree, in that I think there's an amazing number of talented developers up here, and that's partly because of the heritage of the area, but it's also that we're supported by some very good universities. I think the universities here can stand up against any university in the country actually in terms of games courses.

Northumbria University has some great programming courses, and there's good games art courses around. Of course we reach out to universities further away, and to places like Durham and Newcastle for things like physics and computer science. But, certainly, universities are a strong point of the area. That really supports our growth.

Jobling: Where I think that the North East is a bit ahead of the game in terms of education, is that for a very long time the games companies have worked with the universities. While elsewhere people have criticised games education, here it has worked really very well.

Frankie Cavanagh, Course Leader for Games, Web and Mobile Applications, Gateshead College: We're quite new in the games development space, but it's been a huge growth area for us, and we've approached a lot of the people around this table and at other studios, and had help

Champions of the local hub (left-to-right) Frankie Cavanagh of Gateshead College, Darren Jobling from Eutechnyx, and Thumbstar's Gareth Edmondson

designing the curriculum. Studios here are happy to work with universities. Really the entire course has been designed by the industry, and that's really important as the industry changes on what can feel like a weekly basis. And there's an effort here to try and educate students from before University age, including secondary school education.

Robert Troughton, MD, Pitbull Studio: What has been really good for Pitbull in this area, especially working with the Unreal Engine, has been the tech focus and the history of tech focused people that are happy to stay in the area. Because of the area's history, there's a lot of people who don't want to go running to Canada or move down to London. Part of that is also the cost of living here, and how settled people are here.

So is there no reality to the idea that this area of the UK suffers from a UK-internal brain drain to London and the South East?
Jobling: I think, in Eutechnyx's experience it's been the other way round. We can attract people form the down there, and we do. We haven't seen that brain drain at all.

Edmondson: Once you get people to visit and see the area with their own eyes, the perceptions about the northerly part of England are dispelled, and it's not a hard sell to get people to move here. Not at all.

Smith: Yes. I'd agree. We haven't seen that at all. We've had no trouble attracting people to the region, and what Bob [Troughton] said about the loyalty of the staff in the region is really remarkable.

You don't get that thing here that I saw so much in London, where people would routinely move companies every two or three years looking for a slightly higher salary.

> ***"You don't get that thing here that I saw so much in London, where people routinely move companies every two or three years."***
>
> Richard Smith, CCP

It's clear there's an optimism and a community to the games hub here. What's behind that, beyond quality of life?
Stewart: I think it is still that the nature of the region is a very friendly place to live. That's what makes people we've brought in from further away stay for so many years.

And do you feel the area has a status on the global stage?
Edmondson: Definitely. Wherever I've worked in the area we've always managed to attract a significant number of employees from overseas.

Jobling: It's the same for us. We've attracted people from all over the world, and even Canada. Part of it is the status of the companies, and the heritage of the companies that still exist here or used too. There's not many places in the world left with that kind of thing still going on. Some of the other great hubs have faded, but we've remained strong.

So there's resilience to the area?
Smith: I think so. It might come down to the collaborative, symbiotic relationship shared between the different companies up here, and those educational institutions, and even the local councils. Everybody pulls in the same direction to make sure the hub thrives. I get the sense that some of these other hubs that are struggling might be suffering due to the much more cutthroat, competitive nature in other regions.

Jobling: And that was part of the GameHorizon organisation and event being set up. Historically the people in the game development sector didn't know each other too well, to be perfectly honest.

With GameHorizon we tried to make it clear there's a lot more to be gained by collaborating than there is from being isolated companies. Once we started talking, it was clear we should be collaborating.

The hub here in the North East almost feels like an autonomous unit. Is it fair to say that's a strength; a thing you've built on collectively?
Stewart: I don't know if that is the case. Things where we do need support are global

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anyway. Our strength really is that collaboration. For Reflections here in the North East, when we have a need for more staff we can look to the companies around us – particularly with Eutechnyx – and we can plug each other's gaps and help each other through peaks and troughs.

Jobling: There is that collaboration here. And, if anything, there's almost a situation where people from America or Europe are happy to come here to the North East, while people from the South of the UK have a little more of a prejudice about the North, even though they're closer.

So there's a reality that people believe in the 'it's grim up North' prejudice?
Jobling: Well, the media seem to have it. When they want to get a comment on what the people in the North East think, they always find somebody in a social club playing dominoes with a whippet on a lead. But really, that's not relevant to the reality. Newcastle as a whole has got through its tough times, and in general people everywhere now think of it as somewhere modern and cool.

Darren Yeomans, Production Manager, Ubisoft Reflections: There is this strange thing where within this relatively small country people seem to think it's a very long way to come, when really it's not that far. I moved up from the midlands, and 200 miles away in the UK does feel like a long way.

But once you come up and see there's a bubble comparable to what they have in Leamington Spa, it's easy to realise why it's a great place to make games. It's not what's up here that is the challenge; it's getting people to come and see it.

Moving on to the recent confirmation of UK tax breaks for games developers; do you feel confident the area can benefit?
Edmondson: Obviously it's a big victory for the UK games industry, and Tiga deserve much credit for their effort in pushing for it. It's quite complicated, and we're in consultation now with the Government on how to make sure it benefits as broadly as possible.

What is encouraging is how – having been into the Department for Culture, Media and Sport so many times trying to make this happen – now that it has been agreed the Government are being very, very helpful and really trying to find ways to benefit the whole industry. You won't see a gain for every single product there is here, as it is a product specific tax break, but there should be a big benefit to most of us here.

And also, where we see marginal situations of games being profitable or not, and decisions about whether to continue to invest or not, or attract investment from overseas, there will be a real benefit.

In fact, you can see that there's already more interest from overseas, just because of the headlines about UK tax breaks.

Jobling: I must say well done to Tiga, and that overall this is a definitely a good thing, but we must also be careful what we wish for.

It potentially makes independent games developers here much more attractive for a purchase, which is fine, as long as the owners keep those companies going, and we don't see a repeat of situations like with Bizarre Creations being shut down. We should just be a bit tempered before we get the victory flags out.

Troughton: For us it depends how it is done. We're mostly a tech outsourcing company, so we support other companies. If it is tied to a particular product, I'm not sure if we'd benefit all that much. We're also relatively small, at about 15 people, planning to expand to about 25 within a year.

Edmondson: But there would be a benefit to companies like yours here, in that there's an advantage to a UK company using you over an overseas outsourcer. That's how you, and this area, could benefit indirectly.

It's not all decided how it would work, but that's the spirit of it.

WHO'S WHO?

Darren Yeomans, Production Manager, Ubisoft Reflections
Now a senior member of the Ubisoft Reflections team, Yeomans headed to Newcastle after a time at Codemasters Birmingham. Leading the team with Stewart (below), Yeomans and his colleagues are reported to be at work on numerous projects across multiple formats.

Giselle Stewart, General Manager, Ubisoft Reflections
As GM of *Driver: San Francisco* studio Ubisoft Reflections, Stewart heads up one of the UK's longest serving triple-A teams, working closely with Yeomans (above). Reflections opened its doors in 1984, and has in recent years displayed an impressive return to form.

Robert Troughton, MD, Pitbull Studio
Troughton heads up Pitbull Studio, which not only develops games and mobile apps, but also offers outsourcing as a service, specialising in art and code solutions for a remarkable variety of clients. Recently it confirmed to be working with Epic on Unreal Engine 4.

Darren Jobling, COO, Eutechnyx
Eutechnyx owner Jobling is currently overseeing a team creating *Auto Club Revolution* (see page 32); an ambitious social driving game that aims to combine triple-A quality with community and lifestyle features, while connecting automotive brands with consumers. Thanks to Jobling for hosting this roundtable.

Gareth Edmondson, CEO, Thumbstar Games
Formerly studio manger of Newcastle's Ubisoft Reflections, Edmondson now heads up developer, publisher and distributor Thumbstar Games, which specialises in mobile titles. Founded in 2008, Thumbstar today supports over 150 developers, as well as having three internal teams to its name.

Richard Smith, Technical Director, CCP Newcastle
Icelandic MMO giant CCP opened a Newcastle studio in 2010, with a view to focusing a team on *EVE Online*-connected console shooter *Dust 514*, and harness the potential of the North East talent pool. In his role Smith is involved in one of the most technically ambitious console games of recent times.

Frankie Cavanagh, Course Leader for Games, Web and Mobile Applications, Gateshead College
Gateshead College is establishing a wide range of games production, development and design courses (see page 62), and Cavanagh, who also serves as a STEM Ambassador for Creative Technologies and Video Games, is at the helm.

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Grilling the past master

How does 30 years of making games inform your view of how a small studio can thrive today? Remode Studios MD **Ella Romanos** asks Frontier founder David Braben about the future for independantly minded developers

THIS YEAR'S Develop in Brighton Conference brings together established legends and young pioneers to cover every aspect of the modern games industry.

That considered, *Develop* has brought together two of this year's conference speakers from either end of the spectrum to talk about a changing sector.

Here Ella Romanos, MD of online and mobile specialist Remode, asks Frontier founder David Braben about how 30 years in the industry shapes you vision of the future.

Ella Romanos (left) and David Braben (right) represent the diversity of industry speakers taking to the stage at Develop in Brighton

How do you feel the industry has changed over the past three decades, and how do you feel your experience of developing *Elite* back then compares to young devs working on indie projects today?
Back then it was quite amateurish. That's the most noticeable difference between then and now. The other difference is the way we now rattle through time. If you look back at the change that happened in games in the 1980s through to 1995 when the PlayStation arrived, during that time there were amazing changes. But today, looking at something like iOS, we get through those periods of change really quickly, in just a few years. If you look at early iOS games as the beginning, then now we're already in the early nineties.

What advice would you give to a studio starting up now looking for a successful future in the industry?
Look very carefully at what you expect to make from it, and I mean that in so many ways. Back in the early 1980s the revenue of a typical indie game was about £3,000, while the average wage then was £5,720 before tax. So you could live off two games a year.

And now?
If you look at iOS now, the average lifetime revenue of a title is about £3,000; and that average includes all the high sellers, so you should probably consider the average really to be nearer £2,000 for a typical indie game. A lot of the high sellers are made by big teams.

Why do you think that is? What do you think the problem is?
It might not be a problem. But the issue is that if you are a single developer, to make an average national wage, you've got to make about 15 titles a year, and you've really got to hit the big time straight away. Back in the 1980s you could make a living before the point that you hit the big time.

Do you think that problem will get worse, or do people need to accept it and learn to make money from that situation?
People need to make money, so they need to up their game quality-wise. That will help you climb up the average scale. But you still need to have a big hit very quickly.

The other way of doing it is to work with a bigger team so you have the economies of scale, and have a chance of hitting the top end of the spectrum.

> ***"For a single developer to make an average wage, you've got to make about 15 titles a year, and you've got to hit the big time straight away."***
>
> David Braben, Frontier

Moving on to platforms, do you have any ideas about what, in five years time, the key differences will be between platforms from now?
In ten years the world will feel very different in terms of platforms. But then if you look back to ten years ago it was all very different then too.

If you look now at what's around, and compare that with what was around ten years ago, and then compare with what was around 20 years ago, the changes really are pretty dramatic.

So what platform, in the next five years, will you be most interested in, perhaps in terms of focusing your attentions?
I am always fascinated by new approaches. Mobile has been fantastic. Look at all of the changes it has brought about, and the input changes we've had on pads. What even constitutes mobile has blurred. I can see more and more of both divergence and convergence happening in the next few years. So we'll see lots of new things, as we have over the last ten years. We've seen some dramatic changes; we didn't used to have a mobile business to speak of, and before then everyone expected very, very narrow input methods. But look at the user interfaces we've got now, from Wii thorugh to Kinect, Move, and touch screen.

Visit www.develop-online.net to read an extended version of this interview.

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Get Smart

Develop delves into the world of AI and gives you all you need to know on the sector's latest advances, p46

Key Release: GameMaker: Studio

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Heard About: Develop in Brighton

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Pieces of mind

Gaming AI has evolved in exciting new ways during the last few years and continues to move at an impressive pace. **Craig Chapple** asks those at the forefront where it is going, and how best to take advantage of it

Xaitment's pathfinding tech running in Unity, proving AI's move on mobile is well underway

ARTIFICIAL INTELLIGENCE has for a long time been an increasingly crucial tool for developers looking to immerse users of their titles into a game world, bringing an air of believability and realism to the experience.

And as games have becoming more ambitious, with huge blockbusters such as *Skyrim* pushing the boundaries of AI and pathfinding across its wide open landscapes, the need for third-party solutions to help save on time and costs and provide intuitive programming systems has become more crucial than ever.

With companies largely no longer isolated in trying to develop the perfect solutions to AI, and willing to share their knowledge, implementing quality AI has also become somewhat easier through the industry collaborating together at specialist summits such as that seen on GDC's opening day.

But whilst it has arguably become much easier to implement quality AI into games, Thomas Young, founder of NPC navigation tool provider PathEngine, says it has become difficult to make these systems suited to accommodating for today's large scale games.

"It's still very tricky to make these kinds of systems really robust, and this side is something that is simultaneously getting a lot harder as game environments get larger and more complicated, and as audiences get more demanding, so it's definitely still no piece of cake," he explains.

SCALING DOWN

But whilst triple-A console titles are becoming an increasing focus for many studios, numerous others are making increasing efforts to release content on a plethora of platforms, including web and mobile, creating the need for many of these tools to also provide scalable solutions.

> ***"We are confident that Kynapse and Cognition will really help developers unlock the potential of smartphones."***
>
> Paul Kruszewski, Autodesk

Specialist AI solution providers such as xaitment have begun bringing their middleware to the space, with xaitMap and xaitControl for Unity being released just after GDC for Android and iOS developers, whilst Havok and Autodesk have updated tools such as Kynapse and Cognition to ensure their products offer a cross-platform solution.

Autodesk's director of business development Paul Kruszewski says that AI and gameplay on smartphones is evolving in a similar way to consoles as they become more powerful and AI becomes more complex, and says the company has worked on adapting its tools to provide fast pathfinding on a low memory footprint.

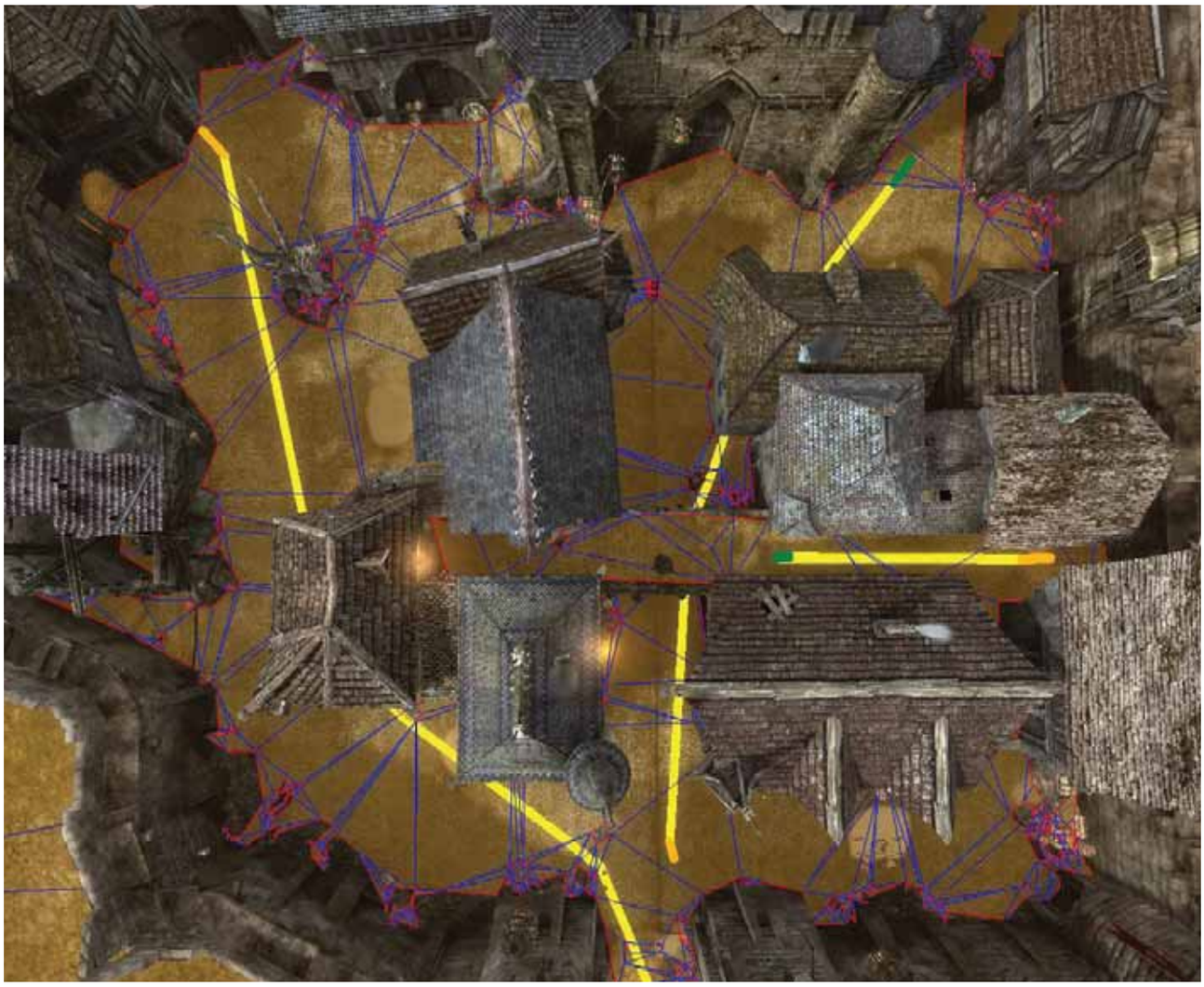
"Originally Cognition was only available for UE3, but we have recently released the product as a full C++ SDK that can be plugged into any engine including ones for smartphones," says Kruszewski.

"Cognition comes with a lot of behaviours so that smaller mobile teams can get up and running with gameplay fast. We are confident that the combination of Kynapse and Cognition will really help developers unlock the potential of the new smartphones."

Havok's AI team lead Chris Elion says its AI solutions were designed from the ground up to be cross-platform, with it important to provide similar coding languages that can be used across different devices so devs do not have to re-learn how implement the tech.

"Like all of Havok's products, Havok AI was designed to be cross-platform from the start," he says. "Most of our code is identical across all platforms, but we also put a lot of time into optimising the vector math and multithreading parts that are more specific. This in turn helps game developers reuse the same code on different hardware but still get optimal performance."

But despite smartphones becoming more powerful, Ubisoft Montreal exec director Yves Jacquier says that, given the difference in the



AI experts Chris Elion from Havok (top), xaitment's Mike Walsh (middle), and Autodesk's Paul Kruszewski (bottom). Left: Havok's AI tech in action

nature of mobile games compared to the home console experience, AI should be used to complement a game's playability, and not to provide an all-encompassing module.

"Gameplay and controls are of very different nature between console gaming and mobile gaming, in part because mobile platforms offer very different capabilities than console platforms," states Jacquier.

"Consumers have different expectations for mobile games, and Ubisoft focuses on providing the best experience on each platform, and not on creating a do-it-all AI module that would compromise other aspects of the game."

COMING TO LIFE

As well as adapting to these emerging industry trends, studios and R&D companies have begun developing unique ways to implement AI to offer a more immersive and believable experience. One such area is combining AI with animation so developers can create a smoother link between character actions and navigation, so that an NPC interacts differently depending on their terrain.

Kruszewski says there is currently a significant disconnect between the two areas as the animation system is not always able to execute correctly based on the path an NPC takes.

"The two systems are effectively in separate technology silos," he says. "Visually this results in what is called "foot sliding" which breaks player immersion. We are currently working on two different projects that have two totally different approaches to having the pathfinder and the animation system coordinate.

"As different genres have different animation aesthetics, I think it will end up like collision avoidance; a palette of solutions for different scenarios rather than a monolithic animation driven locomotion super solution."

> ***"In the near future it wouldn't surprise me if characters were able to reason. This could take AI beyond pathfinding."***
>
> Mike Walsh, xaitment

Xaitment CEO Mike Walsh says his company has also been looking at what he sees as a close relationship between AI and animation and is currently working with other middleware firms such as Mixamo and FaceFX to improve its offerings in the space.

"In simple terms, first a character has to decide what to do, and then an animation is played based on that decision," explains Walsh. "We are currently working on some pretty cool opportunities with Mixamo and exploring other ideas with FaceFX as well.

"Triple-A development has traditionally devoted a lot of engineering time to making AI and animation work together, but we believe that indie developers and smaller teams will soon have access to this type of technology too."

A NEW ERA

But as well as further integration with practical animation functionality, other new uses being researched and developed in the AI space include implementations into user interface interactions using controls such as video cameras and microphones.

"Imagine that a game such as *Your Shape: Fitness Evolved* detects how you feel, is able to recognise the movements you have difficulty with or is able to scan your physical environment and use it in the gameplay," explains Jacquier. "Immersion and personalisation are key, and Ubisoft is very much focused on creating very interesting AI innovations to enhance overall gameplay."

As gaming also evolves as a story-telling medium, as seen in titles such as Bioware's *Mass Effect* and the likes of Quantic Dream's *Heavy Rain*, a growing need for individual behaviours has emerged, which Walsh says could open up a new thrilling new era for AI.

"The most exciting aspect is probably individual character behaviors or true

The Université de Montréal (main image), home to the AI research chair, and Ubisoft's AI expert Yves Jacquier (middle). Bottom: PathEngine founder Thomas Young

RESEARCHING NEW FRONTIERS

Founded in March last year, the 'research chair on artificial intelligence' at the Université de Montréal was created as a research partnership between the educational institute and Ubisoft Montreal to investigate new implementations and techniques for AI.

With 20 researchers involved, including students, and another 20 employees working on the findings at Ubisoft, approximately £2 million has been invested into the R&D outfit. £1m has come from Ubisoft and the other half from the Natural Sciences and Engineering Research Council of Canada.

"The objective of the research chair is to develop new learning algorithms that allow the computer to discover good representations of data," says University of Montreal computer science and operational research professor Yoshua Bengio.

"Good representations tend to be more abstract, separating out the different factors – generally unknown ahead of time – that explain the complicated variations seen in the training examples. Over the last year, we have also been applying these algorithms, called deep learning algorithms, to several international machine learning competitions and won both in which we participated."

Current research to come out of the chair includes investigations into personalisation, such as AI taking advantage of observations made of a player's behaviour, and feedback to influence decisions such as multiplayer match-making or recommended in-game items.

Another unique implementation also being researched is using camera and motion capture to improve play-testing by tacking actors' facial features, with the first release of a game containing the chair's machine learning code to release this year.

'intelligence'," he says. "Players are starting to demand that characters need to be more complex and challenging. Providing characters with individual or group behaviors is a good starting point, but in the near future it wouldn't surprise me if characters are able to reason. This could take AI way beyond the realm of pathfinding and open up an entirely new area of video games altogether."

But whilst there are plenty of areas where AI is moving into as it looks to match the challenge of increased customer expectations, with users spoilt by the large amount of triple-A content on offer to them, there are still a number of kinks in the current systems that must be fixed.

PathEngine's Young says that the robustness of navigation behaviours needs to be improved, as current solutions risk pulling the user out of the game with any bugs.

"Personally I always think that the first priority has got to be robustness, and making the navigation behaviours really solid, because the effect of any failure of these systems on user experience – and a kind of baseline believability – far outweighs the advantages of more sophisticated but less obvious AI modeling," he states.

"And the fact that so many games are now multiplayer, or connected, can also mean that there is less demand for NPC AI to provide certain kinds of interactions that can actually be better provided by other human players."

Kruszewski believes that the greatest challenges facing game AI come from production due to the increase in team sizes and their complexity, with studio's often consisting of a large number of different professions all working with the same code. He says that whilst there only use to be one person involved – the programmer who created the NPC AI design and hard coded it – there are now a large number of devs on a project who will come and work on the tech.

"As with other game engine components, the role of a non-programmer designer/artist has slowly started to emerge over the years," he explains. "Now in 2012, on triple-A games, there is a myriad of people who will touch the AI in one way or another: the game designer, the AI programmer, the game play programmer, the tester and the producer.

"A multifaceted AI production pipeline means that you need tools that allow different people to affect the AI in different ways."

POWERING THE EXPERIENCE

One potential issue that has not seemingly affected the AI space however is the long lifecycle of current gen systems.

Despite being stuck with fixed specs and limited CPU space, the relatively long cycle in console terms appears to have actually helped improve the tech, with budgets being increased in AI as the boundaries of high quality graphics are pushed to their limits.

"Since the beginning of 3D games, graphics have always been the top priority," says Kruszewski. "Until the graphics engines settle down for a console generation, AI doesn't become the priority. As we wind down this generation, the graphic engines have stabilised and now allow game developers to focus on non-graphical ways of differentiating their games.

"So paradoxically, the longer the console lifecycle, the more time there is for AI to flourish. In my own production experience, the real limit on the AI is the time that the team has to put into it. This makes the need for tools that allow rapid iteration critical."

Walsh adds that teams are increasingly investing in quality AI for their games instead of in areas such as graphics, animation and physics, citing a realisation in the industry of the need for an immersive playing experience.

"We're seeing teams start to devote more budget to AI," he says. "In the past years teams devoted R&D budgets to things like graphics, animation and physics. Now teams are beginning to focus on making better characters and AI is a big part of that.

"AI can improve gameplay, make your game more fun to play and separate it from the competition."

A NEW FRONTIER

Despite some issues, with a growing increase in importance amongst developers and larger investment being applied to the tech, there is an exciting new era ahead for AI as the next-generation of systems moves ever nearer, and smartphones and web continue to advance apace.

Ubisoft's Jacquier warns, however, that whilst developers can continue to make great strides in complex and sophisticated AI to bring a heightened level of immersion to their titles, they must not forget to make games first and foremost engrossing to play.

"We need to keep focused on what's important; entertaining our customers and creating fun content," he says. "In the near future, games will be more personalised and more immersive, whether the immersion comes from a rich open world environment and/or from a connected experience through multiple channels.

"We should see three different areas of improvement and innovation: procedural content, enhanced NPC behavior and player characterisation to adapt the experience to the user."

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Edited by
Patrick Cozzi and Christophe Riccio

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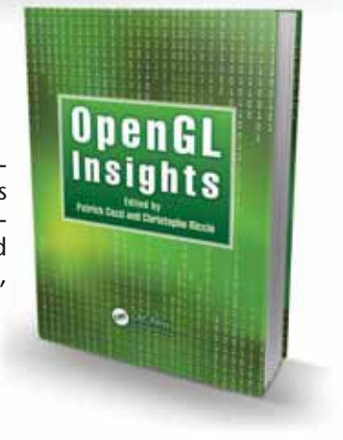

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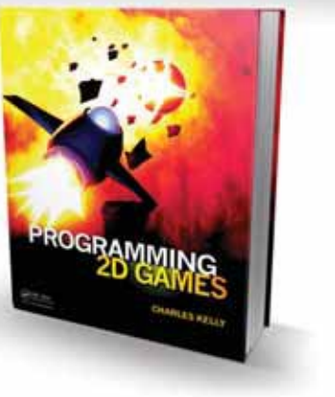

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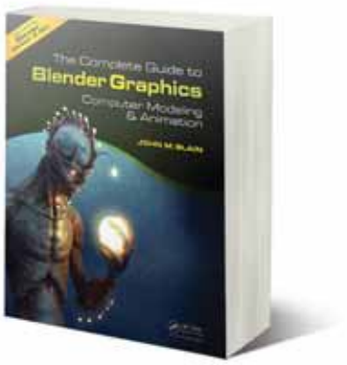

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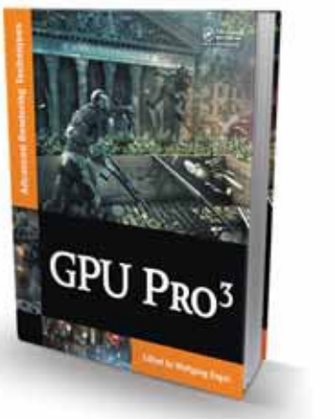

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KEY RELEASE

Will Freeman looks under the bonnet of a new social and browser games engine

WHAT IS IT? A cross-platform development platform for social and browser games with HTML5 support
COMPANY: YoYo Games
www.yoyogames.com

It is a combination of easy exporting and new extensions that gives GameMaker: Studio (top) its potential, says YoYo Games CTO Russell Kay

In essence GameMaker: Studio is a tool to develop social and casual games for mobile, desktop and the web. In that regard, it is not utterly unique, as many games development technologies cater for the creative frontiers of the digital realm with similar offerings.

GameMaker: Studio, however, purports to be the only cross-platform development solution that can serve the likes of iOS, Android, Mac, Windows desktop, and – importantly – HTML5, all from the same code and asset base. While minor tweaks are required for UI elements in that context, cross-platform support that includes HTML5 is a rare thing indeed.

The newly released 'Studio' package builds on YoYo Games' existing GameMaker framework, adding a number of features previously kept in-house for the company's own developments.

"GameMaker: Studio packages up those in-house extensions and uses a simple yet highly effective IDE that ties the whole process up in one clean, easy to use package," explains Russell Kay, chief technology officer at YoYo Games.

"It's the combination of that easy exporting and the new technologies and extensions that separate GameMaker: Studio from previous releases."

THE FIRST TEMPTATION

Allowing studios to develop and distribute from a single code-base to Facebook, Steam, Mac App Store, iTunes, Google Play and others is certainly a proposition that many developers will find tempting.

Adding to the tool's allure is the fact that GameMaker: Studio is able to generate both HTML5 and mobile games in a way that is completely native to a machine's OS. That, say its makers, means no 'runner' apps or other smoke-and-mirrors solutions for getting a sole codebase operating smoothly on multiple formats.

> ***"There is no other tool that can create native code for all of these platforms without substantial changes to the game itself."***
>
> Russell Kay, YoYo Games

"The only 'porting' concern users need to think of is in terms of user interface/experience issues, such as using touch instead of mouse as the input method," says Kay. "There is no other tool that can create native code for all of these platforms without substantial changes or maintenance to the game itself."

Built with maximised efficiency in mind, GameMaker: Studio also promises to be ideal for large studios and indies alike. It uses an open file format so as to enable simple source control, and offers custom tools designed to create GameMaker assets within the IDE.

FIVE ALIVE

Of course, HTML5 support is a key feature for GameMaker: Studio, and, say the tool's creators, is sure to be an important platform for studios considering social and mobile.

"Anyone investing in Flash development and looking to future-proof their skills had better start thinking quickly about what they do next," says Kay of the rise of HTML5.

"There's also the issue of mobile. Mobile and Flash have become mutually exclusive, and you can ask whether that's right or wrong, but you'll have a hard time arguing that this statement isn't true. This means that if your intent is something like creating a cross-platform browser game, you really have to pick HTML5, and GameMaker: Studio makes the process a breeze."

While Kay and his team accept HTML5 browser performance on mobile devices isn't at its full potential yet, he argues the tool they have created can take away the anguish of the 'HTML5-or-not' decisions that currently furrow brows at games studios across the globe. The reason is, he says, that Studio lets each developer decide whether to go for pure HTML5, HTML5 bolstered with WebGL, native to the hardware/OS combination, or all of the above at almost no extra cost.

YoYo's tech comes with some bold claims, but Kay is confident it can deliver the goods.

"Anyone who doubts what it can do should take advantage of the fact that our pricing is very sensible and try it." suggests Kay. "A novice programmer could easily get a game up and running on Google Play and Facebook in less than a week – all for less than $400."

EPIC DIARIES

Mark Rein looks at how UE3 is transforming High Moon Studios' game Fall of Cybertron into something special

WITH THREE TRANSFORMERS games under its collective belt, it's safe to say that High Moon Studios is well versed in the worldwide blockbuster phenomenon. The development team is behind not only the prequel game set before Michael Bay's latest movie incarnation, *Transformers: Dark of the Moon*, but also original titles that delve deeper into the Hasbro toys' mythology.

Andrew Zaferakis, lead programmer on the newest installment in the series, *Transformers: Fall of Cybertron*, credits the studio's familiarity with Unreal Engine 3 with allowing them to hit the ground running and create prototypes of new game ideas from the very first day of development.

"The engine has definitely gone through a large number of changes over the years," says Zaferakis. "We were one of the early adopters of UE3, starting with work on *The Bourne Conspiracy*. Over the years Epic has made tremendous improvements to the engine that we have integrated."

UE3 allowed High Moon's Fall of Cybertron team to prototype ideas particularly quickly

STEEL THE SPOTLIGHT

Matt Tieger, game director on *Fall of Cybertron*, says one example of this custom engine work is apparent in the presentation of metal in the game, of which there is a great deal. "Some of the changes we made have to do with the way metal looks on the Transformers' home planet of Cybertron," he explains. "Because we are taking players to an all-metal world it was important to get it right."

Fall of Cybertron may be the studio's most ambitious undertaking to date, as it is a direct sequel to the critically acclaimed and commercial hit, *War for Cybertron*, the highest-rated Transformers game ever.

Story-wise, the game is more richly steeped in official canon, revealing more of the history of the Transformers before they land on Earth. To bring this epic war between good and evil to life, the High Moon Studios team chose Unreal Engine 3.

"We rely heavily on Kismet for all of our level scripting," says Zaferakis. "It provides our content creators with a toolbox that allows them to build interesting interactions for the player. Kismet is easily extended to provide custom tools specific to Transformers, giving our designers even more control over the game. Matinee is used extensively throughout our in-game cinematics and intricate scripted events during gameplay."

The landscape of Cybertron is in much worse shape than it was in the first game. Huge sections of the planet have simply shut down, and only the Decepticon controlled areas are fully functional. The variety of environments is something the team is very happy with, as each setting has its own unique style. The environmental accomplishments are even more impressive when taking into account that the game was developed with a smaller team than any of the past Transformers games.

"I'm most proud of our ability to work smarter instead of harder when faced with a smaller team," states Tieger. "We have implemented technology that allows us to change code while the game is running, seeing results immediately instead of having to quit and restart."

KNOWLEDGE IS POWER

Zaferakis says that with each new endeavor, the studio builds on the knowledge and code base from the previous games. The team worked hard to identify the feedback the reviewers and community were saying about *War for Cybertron,* and strived to implement changes from the start instead of resorting to guesswork.

With the newest instalment in the franchise, High Moon Studios drew inspiration directly from Transformers characters and their iconic abilities when building gameplay features and environments. Jazz, for example, was known for having a grappling hook in the comics and cartoons. The team felt that was an important component of Jazz's character, and they worked long and hard to convey the experience of grappling in gameplay.

"The major new feature for *Transformers: Fall of Cybertron* is character customisation in multiplayer," says Zaferakis. "Fans can create their own Transformer with far more personalisation options than ever before, and battle against other players online. To accomplish this task every Transformer had to be re-authored for disassembly. Part of the re-authoring process involved improving the textures and shaders on all of the characters, which has a significant improvement in visual quality."

Along the way, Zaferakis says his team used Epic's Unreal Development Network as a knowledge base to draw on when tackling difficult problems. He adds that the UDN community has always been a great resource to answer questions and help other developers in need.

The final product is the most immersive Transformers game experience yet, enabling players to control the infamous robots themselves, choose sides, and engage in multiplayer action against a stunning, war-torn Cybertron backdrop. These revisited and redesigned Transformers incorporate the latest technological advances available, their imposing and memorable presences brought to life by High Moon Studios and Unreal Engine 3 together.

UPCOMING EPIC ATTENDED EVENTS:

GDC Europe
Cologne, Germany
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Gamescom
Cologne, Germany
August 15th -19th, 2012

Please email: ***licensing@epicgames.com*** *for appointments.*

To discuss anything raised in this column or general licensing opportunities for Epic Games' Unreal Engine, contact: **mrein@epicgames.com**

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Canadian-born **Mark Rein** is vice president and co-founder of Epic Games based in Cary, NC. Epic's Unreal Engine 3 has won *Game Developer* magazine's Best Engine Front Line Award five times along with entry into the Hall of Fame. UE3 has won four consecutive *Develop* Industry Excellence Awards. Epic is the creator of the mega-hit *Unreal* series of games and the blockbuster *Gears of War* franchise. Follow @MarkRein on Twitter.

UNITY FOCUS

Craig Chapple visits the Asset Store to discover how the market is faring

UNITY ASSET STORE
Developer: Unity
What is it? A marketplace for assets and extensions
www.unity3d.com/unity/asset-store

NGUI
LIGHTS AND REFRACT
This example shows how to create a lit
that has a refractive see-through bac
This is achieved by using a custom sh
enabling the "Normals" flag on the UIPan
responsible for this window.
Buttons have point lights attached to them that
light up when the mouse hovers over them.
Please note that refraction will only show up on
non-mobile platforms using Unity Pro at "Good" or
higher quality settings.
SHOW
HIDE

NGUI (main image) is the kind of creation that Asset Store manager Caitlyn Meeks-Ferragallo(middle) is always on the look out for. NGUI creator Michael Lyashenko (bottom)

THE UNITY ASSET STORE was launched in November 2010, and has allowed a plethora of developers to upload and share tools and resources to help other users create their games, whilst also introducing a new revenue stream for the engine's users.

18 months on since its inception, the store has more than 100,000 registered users and during May topped 3,000 packages. Unity's Asset Store manager Caitlyn Meeks-Ferragallo claims that it continues to grow at an ever-accelerating rate.

But not just content with its current success, Meeks-Ferragallo says the engine vendor is constantly looking for ways to improve the store and add new tools for developers to take advantage of.

"We're always on the lookout for exciting new assets, especially tools and code libraries," she explains.

"Whenever we see something promising, we often go out of our way to contact developers and invite them to bring their innovations to the store. Many content creators document their projects on the forums, stirring up excitement from expectant users asking 'When will this be available on the Asset Store?' In that sense, it also grows organically."

MONEY-MAKING PLATFORM

One such exciting new asset to successfully take advantage of the store is NGUI (Next-Gen User Interface). The Unity extension helps users create fully-featured user interface systems, which its creator Michael Lyashenko, AKA developer Tasharen, says allows developers to complete most tasks without having to write any code.

Since releasing NGUI, it has had a gross revenue of $60,590 during Q1 2012, netting Lyashenko $42,413 after Unity took its 30 per cent share. Its creator puts the add-on's success down to being in the right place at the right time, and the fact the he is able to offer constant support and provide frequent updates for his customers.

"That's probably one of the most important things," he says. "I try to provide support whenever I am not tied up with some pressing task, and I get notified of every single forum post which lets me respond within minutes when I'm available.

> ***"Unity is still picking up new users, and the Asset Store is gaining new quality content every day."***
>
> Michael Lyashenko, Tasharen

"Frequent updates help as well, although I have less and less of them recently. At some point keeping the system powerful and easy to use ends up being about what gets excluded rather than what gets added."

As well as developing NGUI, Lyashenko has been creating tools for the store since October last year, having avidly scoured the marketplace since its launch for useful assets to purchase. His first creations were simple game prototypes which he says took him just two weeks to make, and sold more than $1,700 worth by the end of their debut month, highlighting the store's potential to generate money for users.

STAYING RELEVANT

As the Unity store has matured, Lyashenko says it has become increasingly more relevant to developers, especially to those on the indie scene. With a wealth of content having been added since its opening, and a steady stream continuing to flow through the store, he adds it is hard not to purchase something, even without an immediate need.

"If anything, it has gotten easier. Unity is still picking up new users, and the Asset Store is gaining new quality content every day," he says. "More people plus more content equals higher retention overall. The more quality content there is available, the more relevant the Asset Store becomes to indie developers such as myself."

Despite its continued growth, however, the NGUI creator feels that there are other aspects of the store that still need to be improved. One such feature he yearns for is to be able to search the store through a web browser, creating a better platform for asset and extension discovery.

"The Asset Store's biggest let-down is the inability to browse it via a normal web browser, hands down," he explains. "I think the amount of quality content on the Asset Store would tempt many new developers to give Unity a try, if it would only reach out to them. Having to go through a 400mb install first kind of puts a damper on that though."

During the coming months, Meeks-Ferragallo says that, having topped 3,000 packages in May, Unity has no intention of slowing down. She adds that the company is committed to bringing developers and designers various models, music, AI libraries and tools in one convenient place without any legal barriers to entry.

She also says that users can expect many more tools and character models added in the near future as the engine maker prepares to reinforce the store to be ready for Unity 4.0. Examples include the new character animation system, which she expects will prompt a big jump in the variety of character models and animation assets available.

HEARD ABOUT

John Broomhall looks at why audio professionals are off to the UK coast this summer

DEVELOP IN BRIGHTON AUDIO TRACK
Date: Thursday, July 12th
Venue: Brighton, UK
www.developconference.com

Develop in Brighton Conference audio track speakers (left-to-right) Garry Taylor from SCEE, Playdead's Martin Stig Andersen and Stephen Root of Codemasters

BEFORE YOU KNOW it, Europe's top games development talent will be gathering on Brighton's seafront once again to discuss the art, technology and business of making today's and tomorrow's video games.

As ever, this year's audio track offers a wide-ranging suite of sessions featuring some of the best game audio luminaries.

Having quietly made his mark on a raft of amazing products over many years for Acclaim, Criterion/Electronic Arts, and lately for popular publishing and development heroes Codemasters, keynote speaker and director of audio Stephen Root is one of our leading audio talents.

His award-winning work covers the pioneering *Burnout* franchise, *Black*, *Operation Flashpoint*, *F1*, *DiRT*, *GRID* and many more. In Brighton Root will reflect on lessons learned during a career spanning nearly two decades, talking about what inspires him and what he sees as the critical factors for today's videogame soundtracks.

TAYLOR MADE

Joining him on this year's impressive speaker roster will be Garry Taylor, audio director for SCEE's Worldwide Studios Creative Services Group, who oversees audio content and technology provision to games in development at Sony's London, Cambridge, Liverpool and Evolution studios.

His session, entitled 'Fighting The Loudness War' will examine how a lack of loudness standards in the games industry has been a perennial problem for both developers and consumers leading to significant inconsistencies in loudness between different titles, reduced dynamic range, and in some cases, bad audio engineering practices.

At the beginning of 2011, SCE Worldwide Studios formed the Audio Standards Working Group. One of their first tasks was to tackle loudness issues on PlayStation platforms in order to give consumers a consistent volume experience on all media playable on SCE platforms. Taylor will look at the work of the group, the state of current media, and the new loudness recommendations for the Sony Worldwide Studios group.

"I'm delighted to be invited to speak at the Develop in Brighton Conference about the work of our group," says Taylor. "Our work on loudness is something we at Sony feel is very important for both developers and consumers alike.

> ***"Our work on loudness is something we at Sony feel is very important for both developers and consumers alike."***
>
> Garry Taylor, SCEE

"The audio track is always both informative and entertaining, and I'm looking forward to being involved again this year."

Meanwhile, Playdead's ace multiple award-winning composer and sound designer Martin Stig Andersen, creator of the enigmatic and beautiful *Limbo* soundtrack, will feature in a session entitled 'Life After *Limbo*'. Andersen will discuss his creative mind-set, process and method, 'providing an engaging insight into his fascinating, if somewhat leftfield, take on game audio'.

"I'm really looking forward to being in Brighton in July," offers Anderson, adding: "Not only to meet with other audio professionals, but also to discuss my creative approach and the issues around audio which absorb and intrigue me."

The conference is also delighted to welcome Alistair Lindsay, for what promises to be a fascinating session titled 'Psychology and Game Audio'; a talk aimed as much at game designers as it is to audio folk. Lindsay will explore basic psychology and how it relates to a player's overall experience of a game – plus how to use subliminal audio cues in a Pavlovian conditioning model and how to inform the player of progress and/or consequences via subtle or unsubtle sound design. He will look at why, as disciplines of any skill-level think and work together, all the proceeding factors can lead to a greater gaming experience for the player and a better overall product for developers.

BRIGHTON ROCKS

So if game audio's your thing, there's really only one place to be on July 12th; in Brighton checking out not just the aforementioned sessions, but all of the speakers' latest ideas, thinking and innovation, as well as networking with them, and partying beside the seaside.

"From the outset, going right back to our first Develop in Brighton Conference six years ago, we've supported audio with its own dedicated track," concludes event director Andy Lane. "We believe the sound and music components of today's video games are a vitally important part of the entertainment experience – more than ever before, in fact."

Amen to that.

We very much look forward to seeing you – and hearing what you have to say in the customary final 'Open Mic' session. Come and be inspired.

John Broomhall is an independent audio director, consultant and content provider.
E: develop@johnbroomhall.co.uk
www.johnbroomhall.co.uk

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www.mscdegrees.com

skillset

RECRUITER HOT SEAT

We ask Eurocom's **Padraig Crowley** how prospective employees can impress the long-standing independent studio

What separates Eurocom from other games development studios?
Eurocom is one of the largest and longest running independent game developers the UK. We've been creating games for more than 23 years, and over that time we have built up a wealth of experience in games development.

In those years we've been around the block several times, so we've witnessed all of the major generations of consoles and the various trends in gaming and player demand.

We may not regularly grab the headlines, but instead we adopt an approach that has served us well – we focus on the games, hitting deadlines and completing the work to a high standard. As a result, we've built a very strong reputation as a developer.

What other perks are there to those working at Eurocom?
As well as the usual benefits such as pension schemes, health insurance, staff parties etcetera that you would expect, Eurocom is also very well located for employees and their families, which is increasingly important as the industry and workforce matures.

Derby is a rapidly developing city. It has a lot to offer but is also easily linked to major cities, has an affordable cost of living and is surrounded by some especially beautiful countryside.

Also, because of the reasons mentioned in the first question above, working at Eurocom gives a fantastic opportunity for young developers to experience working on games from start to finish and get released titles under their belts.

Who is the best interviewee you've ever had and why?
The best interviewees are people that have used their own initiative and differentiated themselves. For example, when a candidate produced an extra unrequested art test piece having researched the current games we were developing, or when a candidate tells you they attended extra uni lectures which were not part of their course itinerary, just to improve their own learning and understanding.

So what about the worst?
Candidates that use a potentially successful interview with us to negotiate their contract with their current employer, people that have sent in work prior to the interview which they clearly haven't completed themselves, and individuals who conduct pre-arranged phone interviews in what sounds like a busy supermarket.

And one awkward exchange with an Aussie programmer who explained the merits of wearing thongs in the office – I eventually realised that Australians use this term for what we know as flipflops.

He was a great candidate though and we offered him the job.

What advice would you give to job-seekers for a successful interview?
We see a lot of people who have the right technical answers and who have the required skills, so candidates really need to set themselves apart and

BIO
Name: Padraig Crowley
Title: Recruitment Manager
www.eurocom.co.uk

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THIS MONTH: TOOLS PROGRAMMER

"Tools programmers are key to the effectiveness of our development teams. We get a lot of CVs so you are going to need to stand out from the crowd.

"Keep your CV concise and tailor it to the specific position you are applying for.

"Excellent practical experience of C# and WPF and/or WinForms is essential. Any other general programming experience – for example C++ – will be relevant as well.

"The programming is the easy bit though. To really succeed in this role, you'll need a deep understanding of workflows, and the interactions between people and systems.

"A portfolio with examples of tools you've created and the benefits they have delivered will ensure we have a great conversation about your skills and experience.

Jonathan Amor, Studio Director of Technology, Supermassive Games

SIX-SECOND STUDIO SPOTLIGHT

- *Stainless Games was founded in* 1994 by industry veteran Patrick Buckland and ex-Body Shop designer Neil Barnden
- The studio is based just off the UK coast on the Isle of Wight
- It is looking to expand on its 51 staff this year by increasing its developer headcount to approximately 70 employees
- The developer has taken to Kickstarter to fund its latest project *Carmageddon Reincarnation*
- Stainless is most famous for its title *Magic: The Gathering,* based on the well-known trading card game created in 1993
- Stainless is a cross-platform studio, recently focusing its efforts on digital download titles for PSN, XBLA, PC and iOS

stainlessgames

think about the extra skills or experience they have that might just be the clincher. Also, we like to see a candidate that can suggest things we've not thought of or who knows something we don't.

> ***We are always interested in hearing from great people. If you think you are one of them, let us know.***

When starting a job, what can new employees do to make a good impression and fit in?
Ask, ask and ask again, don't be afraid to communicate with team members and think about how you can contribute. A new candidate is in the unique position of bringing a new perspective to a project and seeing how things might be done differently and potentially improved.

How many people are you currently looking to hire? And from what fields are you specifically looking to recruit?
At the moment we've got our heads down and are concentrating on finishing two games for the end of this year; *007 Legends*, which has gotten a great reception since it was announced, and another project which we're very excited about but can't talk about just yet.

However, we are currently looking for a character animator and junior motion capture animator, and we are always interested in hearing from great people. If you think you are one of them, let us have your CV.

What is your opinion of the state of games development education in the UK? Is it up to scratch?
It's a mixed bag to be honest and there can be quite a difference between the various courses.

In general, we've found the standard of graduate 3D artists and animators to be quite good. Graduate programmers tend to be inexperienced in commercial-scale development and need a lot of time and training, but I think it's been most difficult to find good graduate game designers.

I know it's tricky because of the wide ranging nature of the discipline, but it seems that game design is often taught as a slightly watered down accompaniment to courses that also have modules in art, animation and programming, rather than a fully dedicated subject in its own right.

Having said that, I would always be wary of the quick-fix 'become an all-round game developer in two-years' type courses. I can see their allure to impressionable school leavers, but they seem to lack any real depth. We find the best students come from three or four-year specialised courses.

We make a point of visiting many of the universities' end-of-year shows, and having students visit the studio whenever possible, as well as offering them work placements.

NEW STUDIO ALERT!

CRASH LAB is a new iOS-focused studio set up by Free Radical founder Stephen Ellis (Left), ex- Rare and Free Radical dev Martin Wakeley (Middle) and former Rare head of art Lee Musgrave (Right).

The new development outfit currently has four core staff, backed up by a network of freelancers, although there are plans afoot to expand the number of the studio's in-house employees.

Ellis even says Crash Lab has already had to turn down projects early on as it would have caused them to grow more quickly than they wanted to.

Focusing on mobile, Ellis says the studio has a wide range of concepts at various stages of development, such as a retro shooter and a casual puzzler, as well as another more secretive social title.

"We decided to move into mobile development because it's a great environment for making games," explains Ellis. "Console development isn't as much fun as it used to be when teams were smaller.

"Smaller teams mean more freedom, more hands-on involvement in the development, greater agility and a level of productivity that just isn't seen in console development. It really is like a return to the old days when we all looked forward to going to work."

MOVERS AND SHAKERS

This month: King.com, Develop, Codemasters Racing, Kwalee and Exient

KING.COM ■ EA Playfish's development director has left the social studio after two years to head up King.com's new London office, where 40 new jobs will also be created.

CATHERINE LAVERS MALLET had been tasked with heading up production on a yet to be revealed 'triple-A' social title at Playfish – a studio EA acquired for more than $300 million. However, she will now work on establishing social games firm King.com's new offices.

"I am thrilled to be setting up a new studio for King.com," said Mallet. "I am excited by the company's vision to be number one in the casual social games category, and have been very impressed by the team and the original IP they have built."

Company CEO Riccardo Zacconi branded King.com as "the global leader in the casual social games space", adding that the firm is "now building out our development capacity to deliver further compelling titles".

DEVELOP ■ We are pleased to announce that *Develop* has hired a talented new staff writer **AARON LEE**. Lee replaces the outgoing Rob Crossley, who leaves as online editor at *Develop* after three years to join consumer games website CVG as associate editor.

21-year old Lee has written for The Independent, Pocket Gamer, PC Advisor and EastLondonLines, as well as freelancing for Intent Media's games titles during the last two years.

"I'm pleased to welcome Aaron to the team, a journalist we have watched and supported for some time since he first did work experience for us in 2009," said *Develop* editor-in-chief Michael French.

"Over the years his contributions to the Develop 100 and other projects have been invaluable – he'll be a credit to the existing team of Will and Craig."

Lee joins the team from July 9th.

CODEMASTERS RACING ■ Codemasters has continued its year-long hiring spree of more than 100 developers by recruiting **ROBERT PADILLA** (*left*) and **LEWIS TUPPIN** (*right*) at its studio in Warwickshire.

Padilla, who left Lightning Fish Games in December, and has also recently worked on *The Witcher 2: Assassins of Kings*, joins the developer's *DiRT* and *GRID* coding team to work on a yet-to-be announced racing title.

Tuppin meanwhile has left his position as production assistant at Fish in a Bottle to join Codemasters Racing in a similar role, where he will work across all titles for the studio.

"We remain committed to bringing the most talented developers into our studio, whether at graduate or experienced levels," said Codemasters VP of development Julian Widdows. "Lewis and Robert are great hires who we know will both make an outstanding contribution to our future titles."

KWALEE ■ Mobile app specialist Kwalee has carried on with its efforts of increasing its size by hiring **JAMES HORN** (*left*) as head of art and **ADAM PHILBIN** (*right*) as interactive designer.

Horn has previous experience as a senior artist at FreeStyleGames working on the *DJ Hero* series and at Codemasters as environment group lead artist on *Colin McRae: DiRT*.

Philbin, whose role also includes development team leader, has had previous stints as interactive designer at Neon Play, whilst he has also worked in web design and games journalism.

"Hiring Adam enables us to run two separate development teams with his invaluable experience in mobile gaming, having created number one chart-topping iPhone games at Neon Play," said Kwalee CEO David Darling.

"James Horn arrives as head of art, leading the new art department. He had the unique opportunity of helping create *DJ Hero I* and *II*, a multi-million selling franchise, as well as working on major Codemasters games and being an established fine artist."

EXIENT ■ Oxford independent studio Exient has appointed **MIKE COX** as its new business development director.

Cox has worked in similar roles at animation outfit Imagination Studios and Monumental Games, as well as serving as studio head of Chemistry, part of the Kuju Entertainment Group.

"We're delighted to welcome Mike as our new business development director," said Exient CEO David Hawkins. "Mike is an Industry veteran with many years of development experience under his belt and he will help us expand our team and services to an even broader range of clients.

"There are many exciting things happening at Exient right now, including some very big news to be announced at E3."

Services & technology recruitment hot seat

We kick off our new section by speaking to Axis Animation MD Richard Scott about working outside development

Why should developers join Axis rather than traditional studios?
We live and breathe for creativity and quality. We are only as good as our last project. You get to work with an experienced award-winning team as well as with some of the biggest entertainment and video game brands in the world.

How many staff are you currently looking to hire this year?
Over the next one-to-two years we are looking to add at least 20 people across a range of roles from creative to operations at junior to management levels.

Which disciplines are you most in need of?
Due to our recent project wins there is a fantatic new opportunity to add an operation manager to the team. This is a pivotal role and will sit in a key strategic and operational position, linking and managing resources, production, finance, systems and commercial direction.

On the creative side we are most in need of experienced lead 3d artists, VFX artists and rigging TD's. On the more technical side we are looking for technical animation supervisors and software/tool developers to join our pipeline team, especially those with realtime engine experience.

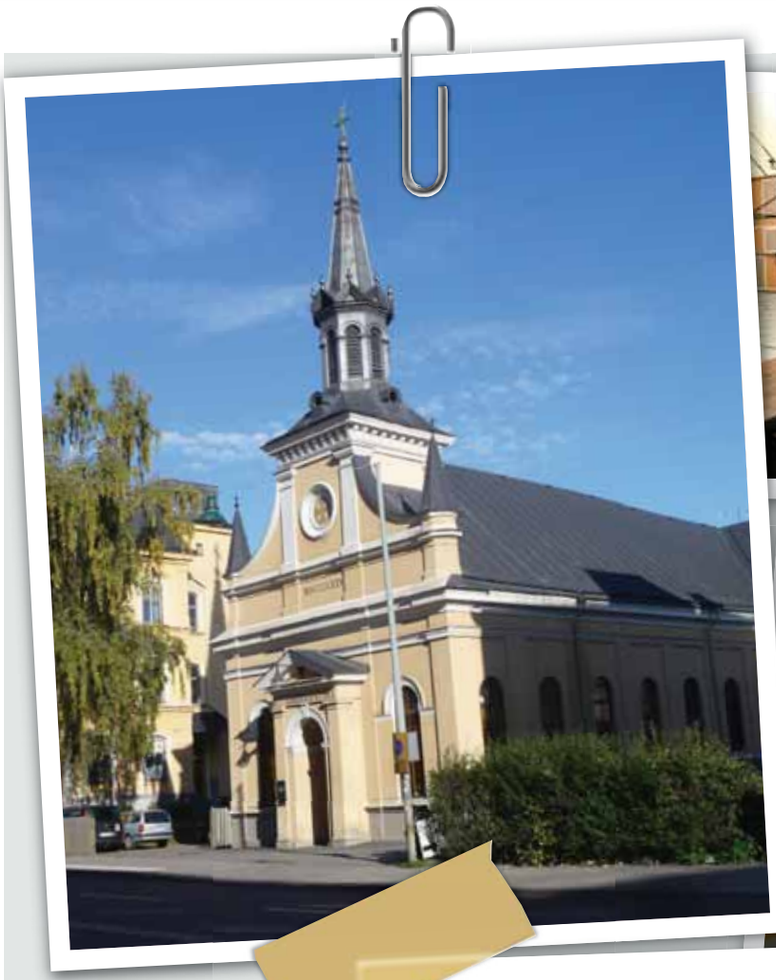
What makes a successful CV?
The best CV's are short and clearly laid out. Highlighting skill sets, recent experience and software skills. From that we can very quickly see if that person fits the bill. From that point on everything is about the person, their creative ability, communication skills and personality. If you are going for an art role your portfolio or showreel matters more to us than your CV.

What is the worst application you have ever received?
There have been quite a few, too many to list. Getting your facts straight in any application is massively important. Make sure you spell the company's name correctly, for example. Do some research; we've had people apply who say they can't wait to work with us in London. We are based in Glasgow.

What advice can you give aspiring developers for putting together a good application?
Research is the first thing. Research the company; the role and who else is hiring for similar roles. Next up is to tailor your application based on your research. Don't just blanket the same cover letter and CV to everyone, it is very obvious when that is happening.

Be honest on your CV, be honest in your cover letter and most importantly be honest with yourself, are you really right for this role? Lastly showcase yourself, create a website to show your work, a blog to show you personality and what inspires you. You are after all selling yourself to the employer.

www.axisanimation.com



Imagination Studios

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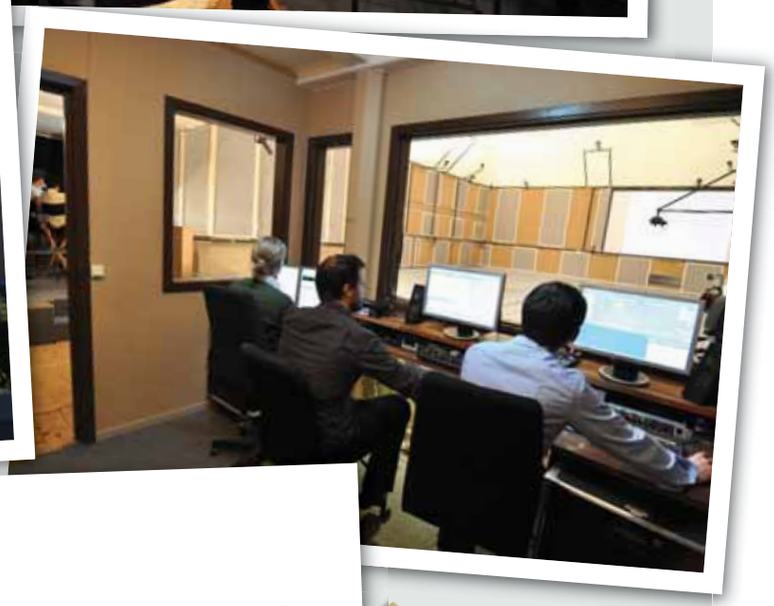

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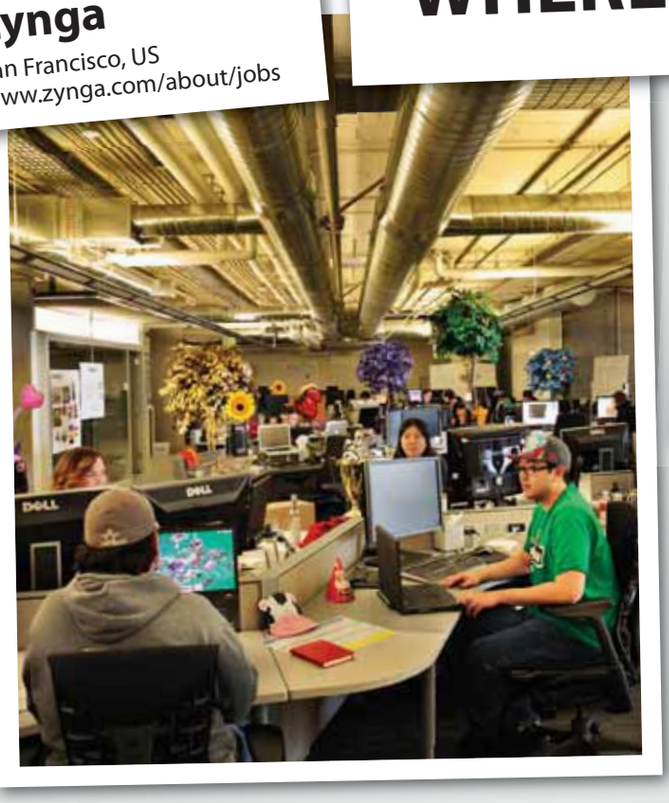

SERVICES SPOTLIGHT

This month: **Synthesis Germany**

LOCALISATION FIRM Synthesis Germany is a new facility based in Hamburg, formed through Synthesis' acquisition of Periscope's translation, audio recording talent and infrastructure, which will be half-owned by both companies.

The new firm offers translation, audio recordings and testing, with the aim to help its clients through the process of localisation. Specialising in German, the outfit also localises for other languages.

The company consists of 50 per cent Periscope employees, with the rest of the staff newly brought in to the studio. The firm's internal headcount currently stands at eight, who work with over 25 freelancers, including translators, audio engineers and directors.

"We had some talks last year and both parties agreed it is of mutual interest to do business together officially for the very reason that we noticed that we are very similar in how we approach things," says Synthesis Germany localisation manager Jan Werkmeister of the partnership.

"We discussed the possible settings and in the end agreed to set up a 50/50

joint venture company called Synthesis Germany. This new company should take over all Periscope localisation resources like parts of staff, offices, IT infrastructure, and studio while Periscope continues its creative services – music production, sound design, trailer production – as well as its game music middleware psai."

Werkmeister adds that the merger means the company can add to its European services which already include Italian, French and Spanish localisation, and is able to provide them to clients 24/7 to help developers meet tight deadlines when looking to ship a game on time. The company also offers translations in Chinese, Russian, Turkish and Japanese.

And despite being new to the industry, the Germany branch has already worked in some form on localising games such as Bethesda's *The Elder Scrolls V: Skyrim*. Werkmesiter believes this shows the service provider is ready to meet the high quality demands of various triple-A studios around the world.

Moving forward, he says Synthesis Germany is looking to extend its translation services, including "true cultural adaption" of a game, whilst improving workflows to become more efficient with more complicated projects.

The company is also looking to adapt to the demands of mobile and browser gaming.

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TOOLS SPOTLIGHT

This month: **Atlassian**

FOUNDED IN 2002 in Sydney, Australia by Mike Cannon-Brookes and Scott Farquhar, Atlassian is a middleware provider responsible for project tracking and management tool Jira 5.

Now on its fifth iteration, Jira helps developers track issues, tasks, features and bugs, whilst it can also be integrated with the firm's other solutions such as agile project management tool Greenhopper and code review middleware Crucible, as well as hundreds of third-party add-ons.

Group marketing manager for Jira Ken Olofsen says that Atlassian's tool differentiates itself from similar products by allowing company-wide collaboration thanks to various social features, as well as customisable workflows to fit Jira into the various different kinds of development processes from small mobile studios to the largest of the console-focused firms.

Companies to use the middleware include Nintendo, Ubisoft, Blizzard, Activision and Sega, and it has been harnessed for titles such as *Iron Man 2* and *Second Life*, the latter of which it was used in to track "tens of thousands" of issues and bugs.

The latest version of Jira allows developers to directly talk to each other via Twitter-like mentions, share their progress, and view activity streams remotely in a move that Olofsen says is crucial to development given its hugely collaborative nature.

"This is especially important within game development, since gone are the days when a developer is just heads-down, coding away in isolation," he explains. "The development team works closely not only with graphics artists, sound engineers and QA testers, but they also need to stay in tune with other areas of the business including the support, sales and marketing departments, to name a few."

Also offering add-ons for manual exploratory testing and traditional case management, Olofsen says Jira 5 helps QA and development teams work closely together during the testing phase to manage and tackle issues in an "efficient and transparent manner".

Further updates are planned to the current version of Jira, with the next iteration expected this summer as part of the company's aim to release three-to-four major updates a year.

The new version, reveals Olofsen, will work on improving the bug-tracking tool's ease-of-use for new teams getting to grips with the middleware, and also make the processes of identifying issues a considerably faster process.

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TRAINING SPOTLIGHT

This month: **Gateshead College**

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W: www.gateshead.ac.uk

BASED IN THE UK's North-East development hub, Gateshead College runs a number of games development courses targeted at 16-to-18 year old students looking for careers in the games industry.

Offering courses at Levels two-to-five across disciplines including design, visuals, development, production and mobile applications, course leader Frank Cavanagh (*inset*) says the training the college provides has been developed in line with recommendations detailed in the Livingstone-Hope Skills review.

As well as its games inspired qualifications, pupils can also study an A Level games option alongside other traditional subjects to prepare them for study at university level.

Cavanagh says the college works to prepare its students for the industry by trying to create a "real world" experience, where aspiring developers are given the opportunity to work on practical projects, rather than just studying the ins and outs of games development from a book.

"This is an area where I think we really excel as we've completely adapted our teaching to be a "real world' experience," he says. All learning takes place in a 'live studio', which means students work to live briefs to develop and deliver commercial products.

> ***"We've extended our provision and now have a clear progression pathway from school leaver through to undergraduate."***
>
> Frank Cavanagh, Gateshead College

"Underpinned by a nationally recognised qualification, our students are continually developing their skills, so that they can immediately put them into practice."

In an attempt to make the subjects more rigorous and industry relevant, Cavanagh says one of the central focuses of the courses, as well as

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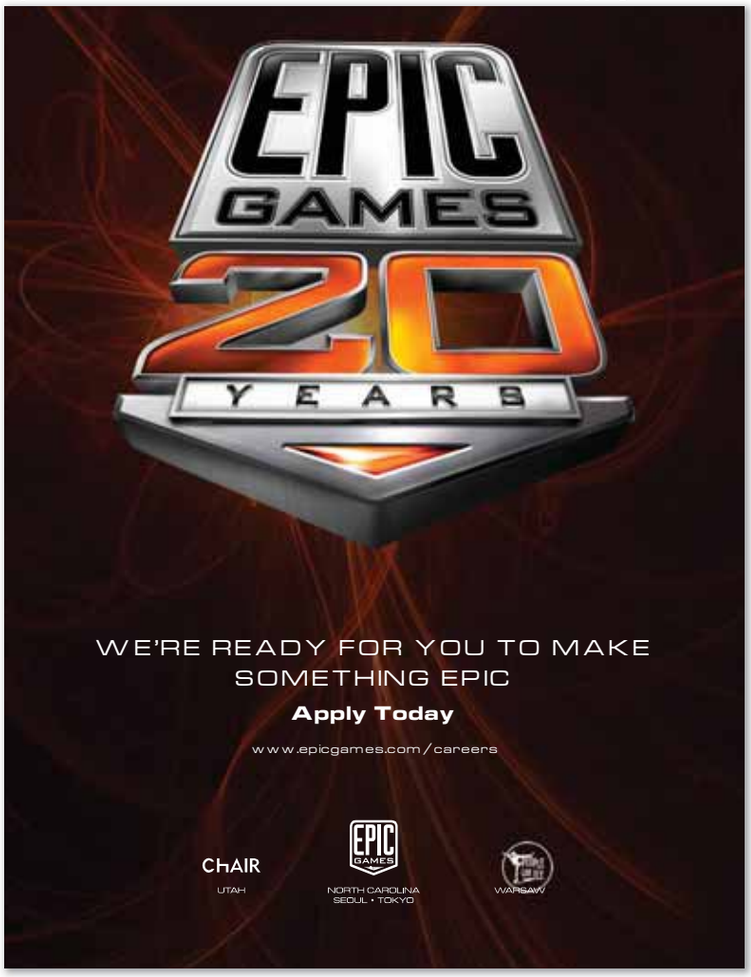

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practical games development time, is on mathematics, with an emphasis on probability, linear algebra and calculus.

The college teaches students with tools such as UE3, Unity, CryEngine, Autodesk and Adobe suites, as well as various programming languages to keep them up-to-date with middleware used everyday in the industry.

As well as providing new tech, the school also has a number of creative partnerships with local studios such as Thumbstar, Eutechnyx and Codeworks to ensure it is able to deliver the skills developers demand, and present students with first-hand knowledge.

During the next few years Cavanagh says the educational institute has plans to change with an ever-evolving industry to keep its training for aspiring developers relevant, and also integrate it more easily with undergraduate courses.

"We've recently extended our provision and now have a clear progression pathway from school leaver through to undergraduate," he says. "In the future, this will grow even further and we have an ambitious vision for our live studio."

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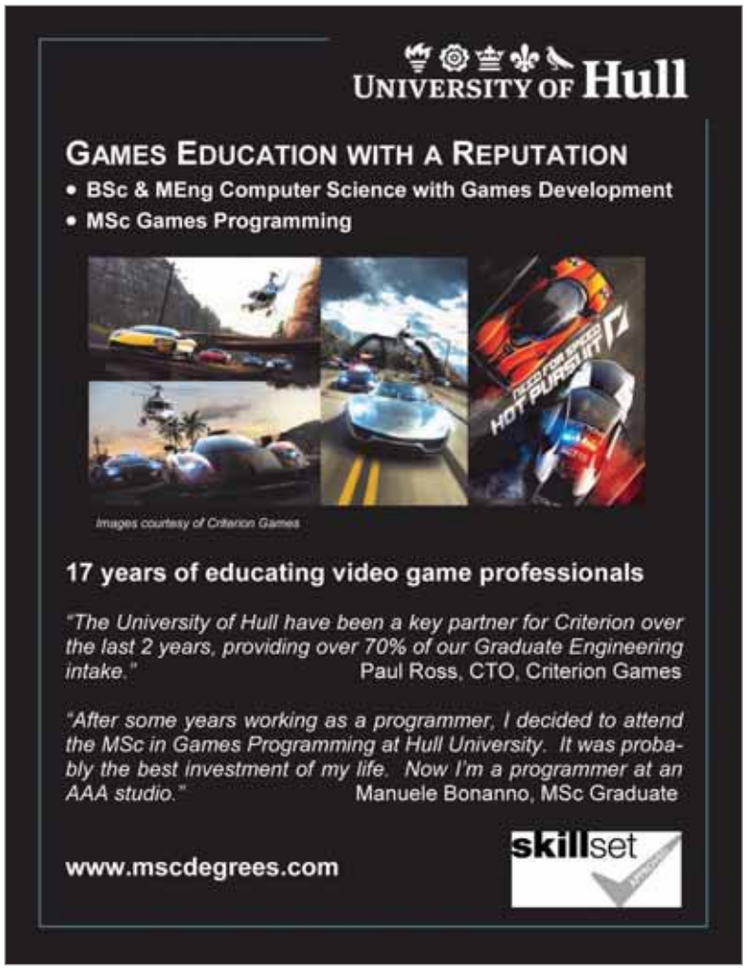
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• MSc Games Programming
Images courtesy of Criterion Games
17 years of educating video game professionals
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"After some years working as a programmer, I decided to attend the MSc in Games Programming at Hull University. It was probably the best investment of my life. Now I'm a programmer at an AAA studio." Manuele Bonanno, MSc Graduate
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1. SO LONG, AND THANKS FOR PHIL FISH (ALL-STAR TEAM)

THE DEVELOP QUIZ

The scores are in for the most recent Develop Quiz, so it's time to round up the points

LAST MONTH SAW the finest minds from across the UK's games industry descend on the bi-annual Develop Quiz.

An all-star team eventually took home the sought-after trophy after a closely fought tiebreaker closed the night.

The winning team, named 'So Long and Thanks For Phil Fish', consisted of a collective of indies and industry experts from studios Spilt Milk, Mobile Pie and Indie Skies, as well as media law firm Osborne Clarke, and audio outfit Gavin Harrison Sounds.

Thanks to all the teams, the quiz's sponsor Deep Silver, and our round sponsors Jagex, Testronic and Avatar Games Recruitment, the ever-popular event was a huge success. Everybody enjoyed themselves immensely, locking horns over movie one-liners, game over screens and much more.

If you want to be there for our September 19th Develop Quiz, keep an eye on our website, or email kathryn.humphrey@intentmedia.co.uk.

1. WINNERS: So Long, And Thanks For Phil Fish	**61 points**
2. Creative Assembly 1	61 points
3. Testronic	61 points
4. Shepard Lives	59 points
5. Bossa Studios 1	59 points
6. Blitz Games Studios	59 points
7. Unity UK	58 points
8. Splash Damage	57 points
9. War Chest	57 points
10. Curve Studios	56 points
11. Wave Studios	54 points
12. First Touch Games	54 points
13. Bossa Studios 2	54 points
14. Jagex	53 points
15. Big Head Games	53 points
16. Creative Assembly 2	52 points
17. Deep Silver	51 points

2. CREATIVE ASSEMBLY (TEAM 1)

3. TESTRONIC

6. BLITZ GAMES STUDIOS

7. UNITY UK

10. CURVE STUDIOS

11. WAVE STUDIOS

14. JAGEX

15. BIG HEAD GAMES

avatar GAMES RECRUITMENT

DEEP SILVER

4. SHEPARD LIVES (ALL-STAR TEAM)

5. BOSSA STUDIOS (TEAM 1)

8. SPLASH DAMAGE

9. WAR CHEST

12. FIRST TOUCH GAMES

13. BOSSA STUDIOS (TEAM 2)

16. CREATIVE ASSEMBLY (TEAM 2)

17. DEEP SILVER

JAGEX GAMES STUDIO

TESTRONIC laboratories

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JULY 2012

Analytics & Consultants
Examining how metrics tools and independent advice on gameplay and content can turn around your project

BUILD Special Feature: Technology for Social Games
A detailed look at the tools, analytics devices, platforms and unique techniques that define how social games tick

Events:
Develop in Brighton Conference – July 10th to July 12th
Develop Awards – July 11th

AUGUST 2012

Develop Industry Excellence Awards 2012 Retrospective
We look back on this year's awards ceremony and tell you who and what the big winners were

BUILD Special Feature: Apps and Mobile game dev tech
An investigation into the tools that underpin the increasingly important smartphone games space

Regional Focus: Nordic Regions
We examine a sector that's home to some of the world's biggest hits

Events:
GDC Europe – August 13th to August 15th
Edinburgh Interactive 12 – August 9th to August 10th

SEPTEMBER 2012

User Interface Tools & User Interaction
Touch screens, motion controllers and gesture inputs have changed how players interact – but how have they changed how games are made?

BUILD Special Feature: Graphics and Rendering
An update on the tools and applications for cutting edge graphics and on-screen beauty

Regional Focus: Germany
We delve into the thriving development hub from one of Europe's most powerful economies

Events:
Tokyo Game Show – September 20th to September 23rd

OCTOBER 2012

Start Your Own Studio
Setting up on your own? We can help out with a range of features written by experts in business, finance and law

BUILD Special Feature: Character Animation
This head-to-toe guide examines what's new in the technologies that make games characters walk, run and, of course, save the world

Regional Focus: South & Latin America
Develop takes you on a visit to one of the industry's most talked about emerging markets

Events:
GameCity Nottingham – October 20th to October 27th

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THE FAQ PAGE: ALEX WARD

Develop grills respected figures from the global games industry

Burnout creator Alex Ward, who owes some of his love for gaming to a stop on the M6 motorway

Who are you and what do you do?
Alex Ward, vice president and creative director at Criterion Games, and creative director of driving, at Electronic Arts.

What are you working on right now?
I'm working on two unannounced projects. At Criterion, '*Project Hawaii*'. At our brand new EA Gothenburg studio in Sweden – and we're hiring by the way – there is another project there I am involved with.

What was the first video game or product that you ever worked on in the industry?
That would be a project which began life as '*Project Shiny Red Car*'– a game that became the first *Burnout* title back in 2000.

What was the first video game you ever played, and did you enjoy it?
First home system? *Pong* on an orange Binatone TV Game System in 1976. First home computer game? *Sniper* on Sinclair ZX-81 at a friend's house. A man appeared onscreen and you had to press a number key between one and nine to shoot him. First coin-op game? Either *Breakout* or *Moon Cresta* somewhere on the M6.

What was the most recent video game you ever played, and did you enjoy it?
In my Xbox 360 today is *Max Payne 3* by Rockstar. I've only watched the intro sequence but I was blown away. Isn't it an amazing time to be playing games? From ZX-81 to this. Astonishing stuff.

> ***"I do wish the UK was back leading the world like it was in the 1980s. I firmly believe we have the best coders, artists and creative people here."***

What is your favourite game ever, and for what reason?
I am always surprised when people struggle to answer this one. Not me. I would say *Asteroids* – the original arcade machine. And it would have to have the proper monitor installed with the magnesium like glow, and be fully refurbished by Archer MacLean – the man with the best collection of arcade machines ever.

How many hours a week do you spend playing video games?
Far less than I ever used to. Less than ten hours a week. Currently it's Xbox 360 *Battlefield 3* multiplayer on our own server.

What area of the industry is in need of more investment?
I wish all developers had more time to really finish and polish their games. When it's all done, you can often make significant changes that have a bigger impact to the player. I think a lot of developers would be surprised when they see ordinary players really struggle with their game. It's our job to make it easy, make it fun, and make it entertaining. It should never be a chore.

What do you enjoy about the video games industry today?
I think that the games coming out today are by far the best ones ever made. I know that for sure. I am happiest when in the office in Guildford working with people I've worked with for the past decade.

What disappoints you about the video games industry today?
I would not say I'm disappointed about anything really. It's not for me to say. I do wish the UK was back leading the world like it was in the 1980s. I firmly believe we have the best coders, artists and creative people here. My heroes are still Minter, MacLean, Crowther, Braybrook and the like. And let's not forget the great software houses of Quicksilva, Alligata, Llamasoft or Gremlin Graphics either.

Of all the games you have worked on, which has been your favourite to work on?
The third *Burnout* game, *Burnout 3: Takedown*. We had everything to prove and everyone and everything came together.

What game that you were not involved with would you most liked to have worked on?
Probably the single player part of *Halo Reach*; the best four-player online co-op experience ever. That or *SSX3*.

What other video games developer do you most admire?
Rockstar – for pushing the boundaries of gameplay variety in *GTA: San Andreas*.

What is your favourite book, movie, and album of all time?
Book? *Rude Kids* by Chris Donald. It's the story of Viz comic as told by its founder. Movie? *Green for Danger* – a black and white thriller with the great Alastair Sim. Album? *Rumours* by Fleetwood Mac.

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